



State of Utah

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Department of  
Environmental Quality

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DIVISION OF AIR QUALITY  
Cheryl Heying  
*Director*

10313

**Title V Operating Permit**

**PERMIT NUMBER:** 2700005001

**DATE OF PERMIT:** October 2, 2002

Date of Last Revision: September 18, 2008

This Operating Permit is issued to, and applies to the following:

**Name of Permittee:**

Graymont Western US Incorporated  
3950 South 700 East, Suite 301  
Salt Lake City, UT 84107

**Permitted Location:**

Cricket Mountain Plant  
PO Box 669  
Delta (Millard), UT 84624

UTM coordinates: 343,100 m Easting, 4,311,010 m Northing  
SIC code: 1422 (Limestone, Crushed & Broken)

UTAH AIR QUALITY BOARD

By:

Prepared By:

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M. Cheryl Heying, Executive Secretary

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Brandy Cannon

## **ENFORCEABLE DATES AND TIMELINES**

The following dates or timeframes are referenced in  
Section I: General Provisions of this permit.

Annual Certification Due: August 31 of every calendar year that this permit is in force.

Renewal application due: April 2, 2007

Permit expiration date: October 2, 2007

Definition of “prompt”: written notification within 14 days.

## **ABSTRACT**

Graymont Western US Inc. operates the Cricket Mountain Lime Plant in Millard County, Utah. This plant has been in operation since 1980. The Cricket Mountain Lime Plant consists of quarries and a lime processing plant, including mining activities, limestone processing, five rotary lime kilns, post-kiln lime handling, and truck & rail load out facilities. The rotary kilns are used to convert crushed limestone ore into quicklime. The products produced for resale are lime, limestone and kiln dust. The major sources of air emissions are from mining and material handling and the combustion of fuels for the kiln operation. The Cricket Mountain Lime Plant is a major source for emissions of TSP, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, and HAPs and is subject to NSPS Subparts A, Y, HH, and OOO and NESHAP Subparts A and AAAAA.

## **OPERATING PERMIT HISTORY**

<b>Permit/Activity</b>	<b>Date Issued</b>	<b>Recorded Changes</b>
Title V administrative amendment - enhanced AO (Project #OPP0103130010)	9/18/2008	Changes: Incorporate Approval Order DAQE-AN0103130027-08, dated 8/27/08, that included the following: the PM limit for Kiln #3 was made more stringent, a fuel change was made to allow all five kiln drive engines to burn gasoline or diesel, and references were updated.
Title V administrative amendment - enhanced AO (Project #OPP0103130008)	12/10/2007	Changes: Incorporate new Approval Order DAQE-AN0103130022-07, dated 8/14/07, that included the following: add Kiln #5 and associated conveyors, screens, silos, loadouts; replace the wet scrubber on Kiln #1 with a baghouse; add petroleum coke to list of approved fuels for Kiln #1 and 5; add high sulfur coals to the list of approved fuels for Kilns #1 thru #5; add 5 kiln drive engines to the permit (one new engine for Kiln #5 and four existing engines that had inadvertently been left out of the permit); inclusion of 40 CFR 63 Subpart AAAAA requirements; increase production limits; and add monitoring requirements for when pet coke and high sulfur coal are used as fuel in the kilns.
Title V significant modification (Project #OPP0103130006)	12/14/2006	Changes: To correct the monitoring frequency on the 40 CFR Part 60 Subpart HH particulate matter limit for Kilns 2, 3, 4. The testing frequency was intended to be "at least once every three calendar years", but was inadvertently placed in the permit as "once every 8,000 hours of operation or once every 3 calendar years from issuance of this permit, whichever comes first". This modification corrects the oversight in conditions II.B.3.h, II.B.4.g, II.B.5.g. No other changes were made to the permit.
Title V significant modification (Project #OPP0103130005)	8/15/2006	Changes: To incorporate changes approved in DAQE-AN0313021-06, dated 3/16/06, including the following: 1. Installation of a portable crushing system to be used at the quarry. The system includes a feed hopper, primary and secondary crusher, a screen, associated conveyors, and three diesel engines. 2. Removal of baghouse D380. 3. Addition of a pressure washer. 4. Addition of compliance condition for 40 CFR 63 Subpart AAAAA.
Title V administrative amendment by DAQ (Project #OPP0103130003)	7/19/2004	Changes: Incorporate new Approval Order DAQE-AN0313019-04 into Title V operating permit, which includes a new material handling system.

Title V administrative amendment by source (Project #OPP0103130002)	2/24/2004	Changes: Incorporate new Approval Order DAQE - AN0313018-03 into Title V operating permit, which includes new sugar stone system, new baghouses and upgrade of existing baghouses, general lime plant dust control upgrades, kiln #2 fan motor replacement.
Title V initial application (Project #OPP0103130001)	10/2/2002	

## **Table of Contents**

<b>ENFORCEABLE DATES AND TIMELINES .....</b>	<b>2</b>
<b>ABSTRACT .....</b>	<b>2</b>
<b>OPERATING PERMIT HISTORY.....</b>	<b>3</b>
<b>SECTION I: GENERAL PROVISIONS.....</b>	<b>7</b>
Federal Enforcement.....	7
Permitted Activity(ies).....	7
Duty to Comply.....	7
Permit Expiration and Renewal.....	8
Application Shield.....	8
Severability.....	8
Permit Fee.....	8
No Property Rights.....	8
Revision Exception.....	8
Inspection and Entry.....	8
Certification.....	9
Compliance Certification.....	9
Permit Shield.....	10
Emergency Provision.....	10
Operational Flexibility.....	11
Off-permit Changes.....	11
Administrative Permit Amendments.....	11
Permit Modifications.....	11
Records and Reporting.....	11
Reopening for Cause.....	13
Inventory Requirements.....	13
Title IV and Other, More Stringent Requirements.....	13
<b>SECTION II: SPECIAL PROVISIONS.....</b>	<b>14</b>
Emission Unit(s) Permitted to Discharge Air Contaminants.....	14
Requirements and Limitations .....	17
Conditions on permitted source (Source-wide).....	17
Conditions on Observation Point A: Lime Kiln #1 (Unit #A: K-1-S).....	24
Conditions on Lime Kiln #1 (Unit #K-1-BH).....	34
Conditions on Lime Kiln #2 (Unit #K-2).....	41
Conditions on Lime Kiln #3 (Unit #K-3).....	48
Conditions on Lime Kiln #4 (Unit #K-4).....	55
Conditions on Lime Kiln #5 (Unit #K-5).....	61
Conditions on Lime Kilns #1 through #5 (Unit #K-1-5).....	70
Conditions on Kiln #1-5 Drive Engines (designated as Unit #KDE).....	71
Conditions on Observation Point A: NSPS Subpart OOO Baghouses (Unit #A: NSPS-OOO).....	73
Conditions on Observation Point A: Non-Subpart OOO Baghouses (Unit #A: NON-NSPS-OOO).....	75
Conditions on Observation Point A: Limestone Screens (Unit #A: SCREENS).....	75
Conditions on Observation Point A: Silo & Storage Bin Vents (Unit #A: BINS).....	77
Conditions on Observation Point A: Coal Silo (Unit #A: COAL SILO).....	77
Conditions on Observation Point A: Conveyor Transfer Points (Unit #A: TRANSFER POINTS).....	78
Conditions on Observation Point A: Coal Conveyor Transfer Points (Unit #A: COAL TRANSFER POINTS).....	79
Conditions on Observation Point A: Drop Points (Unit #A: DROP POINTS).....	80
Conditions on Observation Point A: Generator (Unit #A: GENERATOR: Sugar Stone System).....	81
Conditions on Direct Fire Heating System (Unit #LS-GRIND).....	82
Conditions on Observation Point B: Conveyor Transfer Points (Unit #B: TRANSFER POINTS).....	83
Conditions on Observation Point B: Drop Points (Unit #B: DROP POINTS).....	84
Conditions on Observation Point C: NSPS Subpart OOO Baghouses (Unit #C: NSPS-OOO).....	85
Conditions on Observation Point C: Non-Subpart OOO Baghouses (Unit #C: NON-NSPS-OOO).....	86
Conditions on Observation Point C: Silo & Storage Bin Vents (Unit #C: BINS).....	87

Conditions on Observation Point C: Coal Silo (Unit #C: COAL SILO).....	88
Conditions on Observation Point C: Conveyor Transfer Points (Unit #C: TRANSFER POINTS) .....	90
Conditions on Observation Point C: Coal Conveyor Transfer Points (Unit #C: COAL TRANSFER POINTS) .....	91
Conditions on Observation Point C: Drop Points (Unit #C: DROP POINTS).....	91
Conditions on Observation Point D: NSPS Subpart OOO Baghouses (Unit #D: NSPS-OOO) .....	92
Conditions on Observation Point D: Limestone Screens (Unit #D: SCREENS) .....	94
Conditions on Observation Point D: Conveyor Transfer Points (Unit #D: TRANSFER POINTS).....	95
Conditions on Observation Point D: Limestone Crushers (Unit #D: CRUSHERS).....	96
Conditions on Observation Point D: Drop Points (Unit #D: DROP POINTS) .....	97
Conditions on Abrasive Blasting (Unit #AB).....	98
Conditions on Haul Roads (Unit #HR).....	99
Conditions on Sugar Stone System (Unit #SS) .....	100
Conditions on Portable Crushing System (Unit #PCS-0).....	101
Conditions on Crushers (Unit #PCS-1) .....	101
Conditions on Screen/Conveyor Transfer Points (Unit #PCS-2) .....	103
Conditions on Conveyor Drop Points (Unit #PCS-3).....	104
Conditions on Engines (Unit #PCS-4).....	104
Conditions on Process Stone Handling Operations (designated as Unit #PSH).....	105
Emissions Trading.....	110
Alternative Operating Scenarios .....	110
<b>SECTION III: PERMIT SHIELD .....</b>	<b>110</b>
<b>SECTION IV: ACID RAIN PROVISIONS .....</b>	<b>110</b>
This source is not subject to Title IV. This section is not applicable.....	110
<b>REVIEWER COMMENTS .....</b>	<b>111</b>

**Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.**

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

## **SECTION I: GENERAL PROVISIONS**

### **I.A Federal Enforcement.**

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

### **I.B Permitted Activity(ies).**

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

### **I.C Duty to Comply.**

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

**I.D Permit Expiration and Renewal.**

I.D.1 This permit is issued for a fixed term of five years and expires on the date shown under "Enforceable Dates and Timelines" at the front of this permit. (R307-415-6a(2))

I.D.2 Application for renewal of this permit is due on or before the date shown under "Enforceable Dates and Timelines" at the front of this permit. An application may be submitted early for any reason. (R307-415-5a(1)(c))

I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

**I.E Application Shield.**

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

**I.F Severability.**

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

**I.G Permit Fee.**

I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

**I.H No Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

**I.I Revision Exception.**

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

**I.J Inspection and Entry.**

I.J.1 Upon presentation of credentials and other documents as may be required by law, the



permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:

- I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))
- I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))
- I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))
- I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))

I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

**I.K Certification.**

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

**I.L Compliance Certification.**

- I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than the date shown under "Enforceable Dates and Timelines" at the front of this permit, and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))
  - I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;
  - I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;
  - I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible

exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.

I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Environmental Protection Agency, Region VIII  
Office of Enforcement, Compliance and Environmental Justice  
(mail code 8ENF)  
1595 Wynkoop Street  
Denver, CO 80202-1129

**I.M Permit Shield.**

I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:

I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))

I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))

I.M.2 Nothing in this permit shall alter or affect any of the following:

I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))

I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b))

I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

**I.N Emergency Provision.**

I.N.1 An "emergency" is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))
- I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))
- I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))
- I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))
- I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))
- I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))
- I.O **Operational Flexibility.**
- Operational flexibility is governed by R307-415-7d(1).
- I.P **Off-permit Changes.**
- Off-permit changes are governed by R307-415-7d(2).
- I.Q **Administrative Permit Amendments.**
- Administrative permit amendments are governed by R307-415-7e.
- I.R **Permit Modifications.**
- Permit modifications are governed by R307-415-7f.
- I.S **Records and Reporting.**
- I.S.1 Records.
- I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))
- I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))
- I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.

- I.S.1.b.2 The date analyses were performed.
- I.S.1.b.3 The company or entity that performed the analyses.
- I.S.1.b.4 The analytical techniques or methods used.
- I.S.1.b.5 The results of such analyses.
- I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.
- I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.
- I.S.2 Reports.
- I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))
- I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i))
- I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. Prompt, as used in this condition, shall be defined as written notification within the number of days shown under "Enforceable Dates and Timelines" at the front of this permit. Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))
- I.S.3 Notification Addresses.
- I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:
- Utah Division of Air Quality  
P.O. Box 144820  
Salt Lake City, UT 84114-4820  
Phone: 801-536-4000
- I.S.3.a.1 All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:
- For annual compliance certifications:
- Environmental Protection Agency, Region VIII  
Office of Enforcement, Compliance and Environmental Justice  
(mail code 8ENF)  
1595 Wynkoop Street  
Denver, CO 80202-1129

For reports, notifications, or other correspondence related to permit modifications, applications, etc.:

Environmental Protection Agency, Region VIII  
Office of Partnerships & Regulatory Assistance  
Air & Radiation Program (mail code 8P-AR)  
1595 Wynkoop Street  
Denver, CO 80202-1129  
Phone: 303-312-6440

**I.T Reopening for Cause.**

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the Acid Rain Program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into this permit. (R307-415-7g(1)(b))

I.T.3 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

**I.U Inventory Requirements.**

An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

**I.V Title IV and Other, More Stringent Requirements**

Where an applicable requirement is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, Acid Deposition Control, both provisions shall be incorporated into this permit. (R307-415-6a(1)(b))

## **SECTION II: SPECIAL PROVISIONS**

- II.A      **Emission Unit(s) Permitted to Discharge Air Contaminants.**  
(R307-415-4(3)(a) and R307-415-4(4))
- II.A.1    **Permitted Source**  
Source-wide
- II.A.2    **A: K-1-S: Observation Point A: Lime Kiln #1**  
Rotary lime kiln and preheater exhaust stack, with emissions controlled by a wet scrubber (W-80).
- II.A.3    **K-1-BH: Lime Kiln #1**  
The same rotary lime kiln and preheater exhaust stack as listed in II.A.2, but with emissions controlled by a baghouse (D-85).
- II.A.4    **K-2: Lime Kiln #2**  
Rotary lime kiln and preheater exhaust stack, with emissions controlled by a baghouse (D-275).
- II.A.5    **K-3: Lime Kiln #3**  
Rotary lime kiln and preheater exhaust stack, with emissions controlled by a baghouse (D-375).
- II.A.6    **K-4: Lime Kiln #4**  
Rotary lime kiln and preheater exhaust stack, with emissions controlled by a baghouse (D-485).
- II.A.7    **K-5: Lime Kiln #5**  
Rotary lime kiln and preheater exhaust stack, with emissions controlled by a baghouse (D-585).
- II.A.8    **K-1-5: Lime Kilns #1 through #5**  
Combination of 5 rotary lime kilns listed above.
- II.A.9    **KDE: Kiln #1-5 Drive Engines**  
Five engines used to rotate the kilns during power outages and certain maintenance activities.  
The kiln drive engines shall use gasoline or diesel for fuel.
- II.A.10   **A:NSPS-OOO: Observation Point A: NSPS Subpart OOO Baghouses**  
Baghouse exhaust stacks: D-7122 (mill, heater, material separator), D-7133 (screen, 3 bucket elevators, 3 silo inlets), D-7141 (truck & rail loadouts), D-310 (kiln #3 screen), D-414 (kiln #4 screen) & D-403 (C-408&C-409 to reclaim pile), D-7142 (rail loadout), D-514 (kiln #5 screen), D-503 (stone transfer from C-510 and C-511 to C-512).
- II.A.11   **A: NON-NSPS-OOO: Observation Point A: Non-Subpart OOO Baghouses**  
Baghouse exhaust stacks: D-10 (kilns #1 & #2 screens), D-331 (loadout area), D-479 (dolo system), D-330 (kilns #2 & #3 lime handling).
- II.A.12   **A: SCREENS: Observation Point A: Limestone Screens**  
S-10 (Kilns #1 & #2 scalp screen), S-310 (Kiln #3 scalp screen) & S-411 (Kiln #4 scalp screen), Sugar Stone System screen.
- II.A.13   **A: BINS: Observation Point A: Silo & Storage Bin Vents**  
Bin vents: D-83 (lime dust silo), D-341 (lime silo), D-333 (lime rail loadout), D-466 (LKD silo).

- II.A.14      **A: COAL SILO: Observation Point A: Coal Silo**  
The coal storage system controlled by baghouses: D-91 (Kiln #1 coal silo), D-94 (Kiln #2 coal silo) & D-391 (Kiln #3 coal silo).
- II.A.15      **A: TRANSFER POINTS: Observation Point A: Conveyor Transfer Points**  
Material transfer to and from conveyor belts, observable from Observation Point A.
- II.A.16      **A: COAL TRANSFER POINTS: Observation Point A: Coal Conveyor Transfer Points**  
Coal processing and conveying equipment, observable from Observation Point A.
- II.A.17      **A: DROP POINTS: Observation Point A: Drop Points**  
Material drop points: stacker belts, silo loadout and drop to bunkers from D-10, D-310, C-465 & PH-0, and drop to: hopper, conveyors (C110-C130), screen, loadout for Sugar Stone System.
- II.A.18      **A: GENERATOR: Sugar Stone System: Observation Point A: Generator**  
An approximately 100 hp generator fired on diesel fuel only. Supplies power to the screen in Sugar Stone System.
- II.A.19      **LS-GRIND: Direct Fire Heating System**  
Heating system within the limestone grinding plant.
- II.A.20      **B: TRANSFER POINTS: Observation Point B: Conveyor Transfer Points**  
Material transfer to and from conveyor belts, observable from Observation Point B.
- II.A.21      **B: DROP POINTS: Observation Point B: Drop Points**  
Material drop points to hoppers.
- II.A.22      **C: NSPS-OOO: Observation Point C: NSPS Subpart OOO Baghouses**  
Baghouse exhaust stack: D-415 (stone transfer to Kiln #4 preheater).
- II.A.23      **C: NON-NSPS-OOO: Observation Point C: Non-Subpart OOO Baghouses**  
Baghouse exhaust stacks: D-447 (Kiln #4 screen house), D-463 (lime blending system), D-530, D-547, D-564 (three baghouses for Kiln #5 screen house).
- II.A.24      **C: BINS: Observation Point C: Silo & Storage Bin Vents**  
Bin vent D-486 (Kiln #4 lime kiln dust silo), D-586 (Kiln #5 lime kiln dust silo), D-589 (Kiln #5 lime kiln dust silo loadout).
- II.A.25      **C: COAL SILO: Observation Point C: Coal Silo**  
The coal storage system controlled by a baghouse: D-491 (Kiln #4 coal silo), D-591 (Kiln #5 coal silo).
- II.A.26      **C: TRANSFER POINTS: Observation Point C: Conveyor Transfer Points**  
Material transfer to and from conveyor belts, including the 435 material handling system, observable from Observation Point C.
- II.A.27      **C: COAL TRANSFER POINTS: Observation Point C: Coal Conveyor Transfer Points**  
Coal processing and conveying equipment, observable from Observation Point C.
- II.A.28      **C: DROP POINTS: Observation Point C: Drop Points**  
Drop to: lime kiln dust pugging T-486, lime kiln dust loadout (T-486), dolomitic lime recycle hopper (N-470), PH-421 to bunker & N-432 (Kiln #4 core bin) loadout, belt conveyors of the 435 material handling system.
- II.A.29      **D: NSPS-OOO: Observation Point D: NSPS Subpart OOO Baghouses**  
Baghouse exhaust stack: D-1 (quarry crusher and screen).

- II.A.30      **D: SCREENS: Observation Point D: Limestone Screens**  
Screens: S-1 (primary screen) and S-041 (secondary screen).
- II.A.31      **D: TRANSFER POINTS: Observation Point D: Conveyor Transfer Points**  
Material transfer to and from conveyor belts, observable from Observation Point D.
- II.A.32      **D: CRUSHERS: Observation Point D: Limestone Crushers**  
Crushers: R-1 (primary crusher) and R-041 (secondary crusher).
- II.A.33      **D: DROP POINTS: Observation Point D: Drop Points**  
Material drop points: stacker belts (C-3, C-304, C-4 & sugar stone stacker) & loadout operations (C-305, C-5 & C-45), to hopper of Sugar Stone System.
- II.A.34      **LQ: Limestone Quarries**  
All mining activities, including drilling & blasting, not otherwise specified. No unit-specific applicable requirements.
- II.A.35      **MISC: Miscellaneous Emissions**  
Emission sources with no unit-specific requirements such as painting, laboratory, acetylene combustion, parts cleaners and comfort heaters. No unit-specific applicable requirements.
- II.A.36      **AB: Abrasive Blasting**  
Equipment used for abrasive blasting.
- II.A.37      **TANKS: Fuel Storage Tanks**  
Four 10,150 and one 12,000 gallon diesel tanks, and one 2,000 gallon gasoline tank. No unit-specific applicable requirements.
- II.A.38      **HR: Haul Roads**  
Truck haul roads from paved highway to plant and from plant to quarry, controlled by water spray and chemical dust suppression.
- II.A.39      **SS: Sugar Stone System**  
This system stores, screens, and loads sugar stone (approximately 6"x3"). Includes stockpiles.
- II.A.40      **PCS-0: Portable Crushing System**  
Includes a feed hopper, primary crusher and secondary crusher (Unit #PCS-1), screen and conveyor transfer points (Unit #PCS-2), conveyor drop points (Unit # PCS-3), and three diesel engines (Unit #PCS-4). Crusher system is rated at 690 tons per hour.
- II.A.41      **PCS-1: Crushers**  
Primary crusher (ICR101) and secondary crusher (ICR102) used to crush limestone at the quarry.
- II.A.42      **PCS-2: Screen/Conveyor Transfer Points**  
Screen, and material transfer points to and from conveyor belts used in the portable crushing system.
- II.A.43      **PCS-3: Conveyor Drop Points**  
Material drop points to the fines and product stockpiles.
- II.A.44      **PCS-4: Engines**  
Three diesel engines, 740 hp combined, that power the crushers, screen, and conveyor belts in the portable crushing system.



- II.A.45 **PW: Pressure Washer**  
The pressure washer is used to wash equipment prior to performing maintenance. It consists of an 18 hp gasoline engine to pressurize the water and a burner to heat the water. The burner uses diesel fuel at a maximum rate of 3 gallons per hour. No unit-specific applicable requirements.
- II.A.46 **PSH: Process Stone Handling Operations:**  
Includes the following emission units that transport material from the 4 storage piles (fines, small stone, medium stone, large stone (sugar)) to the kiln preheaters. Bin transfer points: Bin 203N11 to Conveyor 203C13/203C213, Conveyor 203C213 to Bin 203N26, Bin 203N314 to Conveyor 203C314; Preheater transfer points: Conveyor 203C13 to Kiln #1 Preheater, Bin 203N26 to Kiln #2 Preheater, Conveyor 203C314 to Kiln #3 Preheater, Conveyor 203C514 to Kiln #5 Preheater, and Conveyor 203C413 to Kiln #4 (controlled by baghouse 203D415).
- II.B **Requirements and Limitations**  
  
The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated:
- II.B.1 **Conditions on permitted source (Source-wide)**
- II.B.1.a **Condition:**  
  
Visible emissions shall be no greater than 20 percent opacity unless otherwise specified in this permit (note that this condition does apply to fugitive emissions but does not apply to fugitive dust). [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]
- II.B.1.a.1 **Monitoring:**  
  
Unless otherwise specified, a visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating. Permittee is not required to perform monthly surveys on natural gas combustion sources and petroleum storage tanks. The visual opacity survey shall be performed by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than condensed water vapor are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.
- II.B.1.a.2 **Recordkeeping:**  
  
A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.
- II.B.1.a.3 **Reporting:**  
  
There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.1.b **Condition:**  
  
The permittee shall comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F - Recycling and Emissions Reduction. [Origin: 40 CFR 82] Authority: 40 CFR 82.150(b)

- II.B.1.b.1            Monitoring:**
- The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.
- II.B.1.b.2            Recordkeeping:**
- All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.
- II.B.1.b.3            Reporting:**
- All reports required in 40 CFR 82, Subpart F shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.
- II.B.1.c            Condition:**
- The permittee shall comply with the applicable requirements for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart B - Servicing of Motor Vehicle Air Conditioners. [Origin: 40 CFR 82] Authority: 40 CFR 82.30(b)
- II.B.1.c.1            Monitoring:**
- The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart B.
- II.B.1.c.2            Recordkeeping:**
- All records required in 40 CFR 82, Subpart B shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.
- II.B.1.c.3            Reporting:**
- All reports required in 40 CFR 82, Subpart B shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.
- II.B.1.d            Condition:**
- Sulfur content of any fuel burned shall be no greater than 1.0 pound sulfur per MMBtu heat input for any mixture of coal, unless otherwise specified in this permit, or 0.85 lbs sulfur per MMBtu heat input for any fuel oil. [Origin: DAQE-AN0103130027-08] Authority: R307-203-1
- II.B.1.d.1            Monitoring:**
- The sulfur content shall be determined by the source or the fuel supplier using ASTM Method D-3177-75, D-3174-93, D-3176-89, D-4239-94 or D-55016-95 for coal and ASTM Method D-3175-75 for fuel oil, or an approved equivalent ASTM method.
- If certification is provided by the fuel supplier, the sulfur content shall be tested quarterly from a composite sample or the supplier may provide certification for every fuel delivery.
- If the source provides certification for coal sulfur content, a composite sample shall be tested quarterly from a composite of grab samples taken every 24 hours of operation. If the source provides certification for fuel oil sulfur content, a composite sample shall be tested quarterly.

II.B.1.d.2

**Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.d.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.e

**Condition:**

Fugitive dust at all operational and mining operations shall be minimized. Fugitive dust control measures to be used may include: periodic watering, chemical stabilization, paving, removal of spillage, surface compaction, speed restriction, revegetating, restricting travel, stabilizing loaded material, minimizing disturbed areas, drill dust controls, restricting areas to be blasted at one time, restricting fugitive dust at transfer points and storage piles by applying water, enclosing/covering or stabilizing. [Origin: DAQE-AN0103130027-08] Authority: R307-205

II.B.1.e.1

**Monitoring:**

The permittee shall adhere to the most current fugitive dust control plan approved by the Executive Secretary for control of all dust sources.

II.B.1.e.2

**Recordkeeping:**

Records of all methods used and details pertaining to those methods (i.e. amount and type of chemical used for stabilization) used to control fugitive dust shall be maintained.

II.B.1.e.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.f

**Condition:**

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(2), 40 CFR 63.6(e)(1)(i), and 40 CFR 60.11(d)

II.B.1.f.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.f.2

**Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in a form suitable and readily available for expeditious review and in accordance with Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

II.B.1.f.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.g

**Condition:**

For all emission units subject to 40 CFR 63 Subpart AAAAA, the permittee shall prepare and implement a written operations, maintenance, and monitoring (OM&M) plan in accordance with 40 CFR 63.7100(d). The permittee shall submit the initial plan to the executive secretary for review and approval. Any subsequent changes to the plan shall be submitted to the executive secretary for review and approval. Pending approval by the executive secretary of an initial or amended plan, the permittee shall comply with the provisions of the submitted plan. Each plan shall contain the following information:

- (1) Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable, for each emission unit.
- (2) A monitoring schedule for each emission unit.
- (3) Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating limits in 40 CFR 63.7090(a) and 40 CFR 63.7090(b).
- (4) Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance, including:
  - (i) Calibration and certification of accuracy of each monitoring device;
  - (ii) Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems;
  - (iii) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), and (4)(ii); and
  - (iv) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d).
- (5) Procedures for monitoring process and control device parameters.
- (6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in 40 CFR 63.7090(b), including:
  - (i) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and
  - (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date the corrective action was completed.
- (7) A maintenance schedule for each emission unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

[Origin: 40 CFR 63 Subpart AAAAA] Authority:40 CFR 63.7100(d)

II.B.1.g.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.g.2

**Recordkeeping:**

The permittee shall maintain files of all information required by this condition in a form suitable and readily available for expeditious review and in accordance with Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

II.B.1.g.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

**Condition:**

For all emission units subject to 40 CFR 63 Subpart AAAAA, the permittee shall develop a written startup, shutdown, and malfunction plan (SSMP) according to the following provisions.

- (i) The permittee shall develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the affected emission unit during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control and monitoring equipment used to comply with the relevant standard. [40 CFR 63.6(e)(3)(i)]
- (ii) The permittee shall maintain a current startup, shutdown, and malfunction plan and shall make the plan available upon request for inspection and copying by the Executive Secretary. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (iv) of this condition, the permittee shall maintain each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and shall make each such previous version available for inspection and copying by the Executive Secretary for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected emission unit ceases operation or is otherwise no longer subject to the provisions of 40 CFR 63, the permittee shall retain a copy of the most recent plan for 5 years from the date the affected emission unit ceases operation or is no longer subject to 40 CFR 63 and shall make the plan available upon request for inspection and copying by the Executive Secretary. [40 CFR 63.6(e)(3)(v)]
- (iii) To satisfy the requirements of this condition to develop a startup, shutdown, and malfunction plan, the permittee may use the affected emission unit's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this condition and are made available for inspection when requested by the Executive Secretary. [40 CFR 63.6(e)(3)(vi)]
- (iv) The permittee may periodically revise the startup, shutdown, and malfunction plan as necessary to satisfy the requirements of 40 CFR 63 or to reflect changes in equipment or procedures at the affected emission unit. However, each such revision to a startup, shutdown, and malfunction plan shall be reported in the semiannual report required by this permit. If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the permittee developed the plan, the permittee shall revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the affected emission unit during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the permittee makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the affected emission unit which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under 40 CFR 63, the revised plan shall not take effect until after the permittee has provided a written notice describing the revision to the permitting authority. [40 CFR 63.6(e)(3)(viii)]
- (v) Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by 40 CFR 63 shall not be deemed to constitute permit revisions under this permit and the elements of the startup, shutdown, and malfunction plan shall not be considered an applicable requirement. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan shall be deemed to fall within the permit shield provision in this permit. [40 CFR 63.6(e)(3)(ix)]

Deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Executive Secretary's satisfaction that they were operating in accordance with 40 CFR 63.6(e)(1). [63.7121(d)]

[Origin: 40 CFR 63 Subpart AAAAA] Authority: 40 CFR 63.6(e)(3) and 63.7100(e)

**Monitoring:**

Records required for this permit condition will serve as monitoring.

## II.B.1.h.2

### **Recordkeeping:**

The permittee shall maintain relevant records for the affected emission unit as follows.

- (i) The occurrence and duration of each startup or shutdown when the startup or shutdown causes an emission unit to exceed an applicable emission limitation; [40 CFR 63.10(b)(2)(i)]
- (ii) The occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment; [40 CFR 63.10(b)(2)(ii)]
- (iii) All required maintenance performed on the air pollution control and monitoring equipment; [40 CFR 63.10(b)(2)(iii)]
- (iv) Actions taken during periods of startup or shutdown when an emission unit exceeded an applicable emission limitation, and when the actions taken are different from the procedures specified in the startup, shutdown, and malfunction plan; [40 CFR 63.10(b)(2)(iv)(A) , 40 CFR 63.6(e)(3)(iv)]
- (v) Actions taken during periods of malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when the actions taken are different from the procedures specified in the startup, shutdown, and malfunction plan; [40 CFR 63.10(b)(2)(iv)(B), 40 CFR 63.6(e)(3)(iv)]
- (vi) All information necessary, including actions taken, to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup or shutdown (and the startup or shutdown causes an emission unit to exceed an applicable emission limitation), and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan for that event. [40 CFR 63.6(e)(3)(iii) & 40 CFR 63.10(b)(2)(v)]

The permittee shall maintain files of all information (including all reports and notifications) required by this condition recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.7133 & 40 CFR 63.10(b)(1)]

Requirements of Provision I.S.1 of this permit also apply.

## II.B.1.h.3

### **Reporting:**

In addition to the reporting requirements specified in Section I of this permit, in the event of a startup, shutdown or malfunction, the following reporting requirements shall be followed:

- (i) Periodic startup, shutdown, and malfunction reports. If actions taken by the permittee during a startup, shutdown, or malfunction are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a startup, shutdown, and malfunction report. Actions taken to minimize emissions during such startups, shutdowns, and malfunctions shall be summarized in the report and may be done in checklist form; if actions taken are the same for each event, only one checklist is necessary. Such a report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Executive Secretary semiannually. The startup, shutdown, and malfunction report shall be

delivered or postmarked by the 30th day following the end of each calendar half. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports. [40 CFR 63.10(d)(5)(i) & 40 CFR 63.6(e)(3)(iii), 63.7131(c)(4), 40 CFR 63 Subpart AAAAA Table 7(1)(e)]

- (ii) Immediate startup, shutdown, and malfunction reports. If an action taken by the permittee during a startup, shutdown, or malfunction is not consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph shall consist of a telephone call or facsimile (FAX) transmission to the Executive Secretary within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred (or could have occurred in the case of malfunctions), and actions taken to minimize emissions.

[40 CFR 63.6(e)(3)(iv) & 40 CFR 63.10(d)(5)(ii) & 40 CFR 63.7131, 40 CFR 63 Subpart AAAAA Table 7(2), 7(3)]

#### II.B.1.i **Condition:**

For all emission units subject to 40 CFR 63 Subpart AAAAA that are equipped with an add-on air pollution control device, the permittee shall

- (i) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to an fabric filter; and
- (ii) Operate each capture/collection system according to the procedures and requirements in the OM & M plan.

[Origin: 40 CFR 63 Subpart AAAAA] Authority: 40 CFR 63.7090(b)

#### II.B.1.i.1 **Monitoring:**

The permittee shall inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in the above condition.

#### II.B.1.i.2 **Recordkeeping:**

The results of each inspection shall be recorded and maintained in accordance with Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.1.i.3 **Reporting:**

The permittee shall report each instance in which the operating limit is not met, including periods of startup, shutdown, and malfunction. In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the

- emission limitations during the reporting period;
- e. For affected emission units that do not use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period.
  - (i) The total operating time of each emission unit during the reporting period.
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority.

## II.B.2 **Conditions on Observation Point A: Lime Kiln #1 (Unit #A: K-1-S)**

### II.B.2.a **Condition:**

Emissions of particulate matter shall be no greater than 19.75 lbs/hour, no greater than 0.072 grain/dscf (68 degrees F, 29.92 in Hg), and no greater than 0.60 lb/ton of stone feed (tsf) from the scrubber exhaust stack. [Origin: DAQE-AN0103130027-08, 40 CFR 60 Subpart HH, 40 CFR 63 Subpart AAAAA Table 1] Authority: R307-401-8(1)(a) [BACT], 40 CFR 60.342(a)(1), 40 CFR 63.7090(a)

### II.B.2.a.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested once every 8,000 hours of operation or once every 3 calendar years from issuance of this permit, whichever comes first. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 60 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1 or 1A, and Occupational Safety and Health Administration (OSHA) and/or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. Sampling sites shall be located at the outlet of the control device(s) and prior to any releases to the atmosphere.
  - (2) Sample Method - 40 CFR 60, Appendix A, Method 5 shall be used to determine the particulate matter concentration. The minimum sample volume for each run shall be 0.85 dry standard cubic meter (dscm) (30 dry standard cubic foot (dscf)). The permittee shall conduct three separate test runs for each performance test. The minimum sample time for each run shall be 60 minutes.
  - (3) Calculations - To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

The emission rate of particulate matter (lb/tsf) from each kiln shall be computed for each run using the following equation.

$$E = C_k Q_k / PK$$



Where:

E = Emission rate of PM, pounds per ton (lb/ton) of stone feed.

C<sub>k</sub> = Concentration of PM in the kiln effluent, grain/dry standard cubic feet (gr/dscf).

Q<sub>k</sub> = Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr).

P = Stone feed rate, tons per hour (ton/hr).

K = Conversion factor, 7000 grains per pound (grains/lb).

- (d) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

The permittee shall determine the mass rate of stone feed to the kiln using any suitable device during the kiln PM emissions test. The measuring device shall be accurate to within  $\pm 5$  percent of the mass rate of stone feed over its operating range and shall be calibrated and maintained according to manufacturer's instructions. [origin: 60.343(d), 63.7112 Table 4]

#### II.B.2.a.2

##### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Additionally, hours of operations shall be logged daily. The hours shall be summed and reviewed monthly. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.2.a.3

##### **Reporting:**

The permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test.

Performance test results shall be documented in complete test reports that contain the following information as well as all other relevant information.

- (1) A brief description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results, including opacity;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data recorded and used to establish operating limits; and
- (10) Any other information required by the test method.

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. For affected emission units that do not use a CMS to demonstrate compliance, in addition to

- a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period.
  - (i) The total operating time of each emission unit during the reporting period.
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

**II.B.2.b Condition:**

Emissions of PM<sub>10</sub> shall be no greater than 15.9 lbs/hour and no greater than 0.058 grain/dscf (68 degrees F, 29.92 in Hg) from the scrubber exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.2.b.1 Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested once every 8,000 hours of operation or once every 3 calendar years from issuance of this permit, whichever comes first. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
  - (2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
  - (3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM<sub>10</sub>.
  - (4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

**II.B.2.b.2 Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Additionally, hours of operations shall be logged daily. The hours shall be summed and reviewed monthly.

II.B.2.b.3

**Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.c

**Condition:**

Emissions of SO<sub>2</sub> shall be no greater than 22.4 lbs/hour from the scrubber exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.2.c.1

**Monitoring:**

- (I) Stack testing shall be performed as specified below:
  - (a) Frequency. Emissions shall be tested once every 8,000 hours of operation or once every 3 calendar years from issuance of this permit, whichever comes first. The source may also be tested at any time if directed by the Executive Secretary.
  - (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - (c) Methods.
    - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
    - (2) 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C shall be used to determine the pollutant emission rate.
    - (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
  - (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
  - (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.
- (II) The permittee shall install, calibrate, maintain, and continuously operate a continuous emissions monitoring system (consisting of a SO<sub>2</sub> pollutant concentration monitor and a flow monitoring device) for the continuous measurement of SO<sub>2</sub> emissions on a kiln prior to that kiln burning pet coke or coal with a sulfur content in excess of 1.0 lb Sulfur/MMBtu.

After installation of an SO<sub>2</sub> CEMS,

- a. compliance with the SO<sub>2</sub> limit shall be based on a 3-hour block average,
- b. compliance with the SO<sub>2</sub> limit shall be demonstrated using the CEMS regardless of fuel burned in the kiln, and
- c. stack testing, as specified in (I) above, shall not be required.

The permittee shall record the output of the system for measuring the SO<sub>2</sub> emissions. The monitoring system shall comply with all applicable sections of R307-170, UAC and 40 CFR 60, Appendix B. Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under paragraph (d) 40 CFR 60.13, the permittee shall continuously operate all required continuous monitoring devices and shall meet minimum frequency of operation requirements as outlined in 40 CFR 60.13 and Section UAC R307-170.

When the SO<sub>2</sub> CEMS has been installed calibrated, and is operating, the emission rate of SO<sub>2</sub> in pounds per hour measured by the SO<sub>2</sub> CEMS for each 3-hour block averaging period shall be calculated by the following formula:

$$E_h = K \times C_{hp} \times Q_{hs} \times ((100 - \%H_2O)/100)$$

Where:  $E_h$  = hourly SO<sub>2</sub> mass emission rate during unit operation, lb/hour  
 $K = 1.66 \times 10^{-7}$  for SO<sub>2</sub>, lb/scf/ppm  
 $C_{hp}$  = hourly average SO<sub>2</sub> concentration during unit operation, ppm (dry)  
 $Q_{hs}$  = hourly average volumetric flow rate during unit operation, scfh (wet)  
 $\%H_2O$  = constant moisture value specific to each kiln, percent by volume

The Executive Secretary shall consider the source to be in compliance with SO<sub>2</sub> emission limits when the following provisions are met:

- a. Prior to installation of a SO<sub>2</sub> CEMS on a kiln, the average of three one-hour stack test results are less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- b. After installation of the SO<sub>2</sub> CEMS on a kiln, the 3-hour block average is less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- c. Three-hour block averages shall begin at 12:01 a.m. and end every 3 hours, thereafter.

#### II.B.2.c.2

##### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Additionally, hours of operations shall be logged daily. The hours shall be summed and reviewed monthly.

For the SO<sub>2</sub> CEMS, the permittee shall keep the records specified in R307-170-8 and any additional records required by provision I.S.1 of this permit. These records shall be maintained in accordance with Provision I.S.1.

#### II.B.2.c.3

##### **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

For the SO<sub>2</sub> CEMS, the permittee shall comply with the reporting provisions in R307-170-9 and any additional reporting provisions contained in Section I of this permit. The quarterly reports required in R307-170-9 are considered prompt notification of permit deviations required in Provision I.S.2.c of this permit if all information required by Provision I.S.2.c is included in the report.

#### II.B.2.d

##### **Condition:**

The permittee shall maintain the 3-hour block exhaust gas stream pressure drop across the wet scrubber greater than or equal to the pressure drop operating limit established during the most recent PM performance test. [Origin: 40 CFR 63, Subpart AAAAAA Table 2, 40 CFR 60, Subpart HH] Authority: 40 CFR 63.7090(b), 40 CFR 60.343(c)

#### II.B.2.d.1

##### **Monitoring:**

During each kiln PM performance test, the permittee shall establish the operating limit for the average gas stream pressure drop across the wet scrubber using data for the gas stream pressure drop measurement device. The continuous pressure drop measurement device shall be calibrated

in accordance with the manufacturer's instructions and accurate within plus or minus 1 percent and within plus or minus 250 pascals (one inch of water). The permittee shall collect the pressure drop data during the period of the performance test and determine the 3-hour block average operating limit as specified below.

- (1) Continuously record the parameter during the PM performance test and include the parameter record(s) in the performance test report.
- (2) Determine the average parameter value for each 15-minute period of each test run.
- (3) Calculate the test run average for the parameter by taking the average of all the 15-minute parameter values for the run.
- (4) Calculate the 3-hour operating limit by taking the average of the three test run averages.

The permittee shall demonstrate continuous compliance with the limit by collecting and reducing the wet scrubber operating data as follows.

- A. The permittee shall install, operate, and maintain a continuous parameter monitoring system (CPMS) for pressure drop measurement according to the OM&M plan and paragraphs (A)(1) through (5) below.
  - (1) The CPMS shall complete a minimum of one cycle of operation for each successive 15-minute period. A complete cycle includes sampling, analyzing and data recording.
  - (2) To calculate a valid hourly value, the permittee shall have at least four equally spaced data values (or at least two, if that condition is included to allow for periodic calibration checks) for that hour from a CPMS that is not out of control according to the OM&M plan, and use all valid data.
  - (3) To calculate the average for each 3-hour block averaging period, the permittee shall use all valid data, and have at least 66 percent of the hourly averages for that period using only hourly average values that are based on valid data (i.e., not from out-of-control periods).
  - (4) The permittee shall conduct a performance evaluation of each CPMS in accordance with the OM&M plan.
  - (5) The permittee shall continuously operate and maintain the CPMS according to the OM & M plan, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- B. In addition to the above requirements, for each pressure measurement device, the permittee shall:
  1. Locate the pressure sensor(s) in, or as close to as possible, a position that provides a representative measurement of the pressure.
  2. Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.
  3. Use a gauge with a minimum tolerance of 0.5 inch of water or a transducer with a minimum tolerance of 1 percent of the pressure range.
  4. Check pressure tap pluggage daily.
  5. Using a manometer, check gauge calibration quarterly and transducer calibration monthly.
  6. Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.
  7. At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

The permittee shall monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating, except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments). Data recorded during the conditions described below shall not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement.

- (1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;
- (2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and

(3) Start-ups, shutdowns, and malfunctions.

The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.

#### II.B.2.d.2

##### **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.2.d.3

##### **Reporting:**

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. If there were no periods during which the CMS, including any operating parameter monitoring system, was out-of-control as specified in 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period;
- f. For affected emission units that use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period. This includes periods of startup, shutdown, and malfunction.
  - (i) The date and time that each malfunction started and stopped.
  - (ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - (iii) The date, time and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
  - (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
  - (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.
  - (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
  - (vii) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.
  - (viii) A brief description of the process units.
  - (ix) A brief description of the CMS.
  - (x) The date of the latest CMS certification or audit.
  - (xi) A description of any changes in CMS, processes, or controls since the last reporting period.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to

report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

**II.B.2.e Condition:**

Water supply pressure for the scrubber shall be no more than 30 percent below that recorded during the most recent performance test. [Origin: 40 CFR 60, Subpart HH] Authority: 40 CFR 60.343(e)

**II.B.2.e.1 Monitoring:**

The permittee shall install, calibrate, maintain, operate and record the resultant information from a monitoring device for the continuous measurement of the liquid supply pressure to the scrubber. Continuous shall be defined as, at least, one complete monitoring cycle for each successive fifteen-minute period. A complete cycle includes sampling, analyzing and data recording. The monitoring device must be accurate to within plus or minus 5 percent of the design scrubbing liquid supply pressure and must be calibrated in accordance with the manufacturer's instructions.

This data shall be reduced to a 1-hour average and reviewed, for compliance, on a weekly basis. Any 1-hour period in which the scrubbing liquid supply pressure is greater than 30 percent below that established during the most recent performance test shall be reported as excess emissions.

**II.B.2.e.2 Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

**II.B.2.e.3 Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A.

**II.B.2.f Condition:**

The permittee shall maintain the 3-hour block scrubbing liquid flow rate greater than the flow rate operating limit established during the most recent performance test. [Origin: 40 CFR 63, Subpart AAAAA Table 2] Authority: 40 CFR 63.7090(b)

**II.B.2.f.1 Monitoring:**

During each kiln PM performance test, the permittee shall establish the operating limit for the average liquid flow rate to the scrubber using data from the liquid flow rate measurement device. The continuous scrubbing liquid flow rate measuring device shall be accurate within plus or minus 1 percent. The permittee shall collect the flow rate data during the period of the performance test and determine the 3-hour block average operating limit as specified below.

- (1) Continuously record the parameter during the PM performance test and include the parameter record(s) in the performance test report.
- (2) Determine the average parameter value for each 15-minute period of each test run.
- (3) Calculate the test run average for the parameter by taking the average of all the 15-minute parameter values for the run.
- (4) Calculate the 3-hour operating limit by taking the average of the three test run averages.

The permittee shall demonstrate continuous compliance with the limit by collecting and reducing the wet scrubber operating data as follows.

- A. The permittee shall install, operate, and maintain a continuous parameter monitoring system (CPMS) for flow rate measurement according to the OM&M plan and paragraphs (A)(1) through (5) below.

- (1) The CPMS shall complete a minimum of one cycle of operation for each successive 15-minute period. A complete cycle includes sampling, analyzing and data recording.
  - (2) To calculate a valid hourly value, the permittee shall have at least four equally spaced data values (or at least two, if that condition is included to allow for periodic calibration checks) for that hour from a CPMS that is not out of control according to the OM&M plan, and use all valid data.
  - (3) To calculate the average for each 3-hour block averaging period, the permittee shall use all valid data, and have at least 66 percent of the hourly averages for that period using only hourly average values that are based on valid data (i.e., not from out-of-control periods).
  - (4) The permittee shall conduct a performance evaluation of each CPMS in accordance with the OM&M plan.
  - (5) The permittee shall continuously operate and maintain the CPMS according to the OM & M plan, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- B. In addition to the above requirements, for each flow measurement device, the permittee shall:
1. Use a flow sensor with a minimum tolerance of 2 percent of the flow rate.
  2. Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.
  3. Conduct a flow sensor calibration check at least semiannually.
  4. At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

The permittee shall monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating, except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments). Data recorded during the conditions described below shall not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement.

- (1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;
- (2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and
- (3) Start-ups, shutdowns, and malfunctions.

The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.

#### II.B.2.f.2

#### **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.2.f.3

#### **Reporting:**

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;



- e. If there were no periods during which the CMS, including any operating parameter monitoring system, was out-of-control as specified in 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period;
- f. For affected emission units that use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period. This includes periods of startup, shutdown, and malfunction.
  - (i) The date and time that each malfunction started and stopped.
  - (ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - (iii) The date, time and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
  - (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
  - (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.
  - (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
  - (vii) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.
  - (viii) A brief description of the process units.
  - (ix) A brief description of the CMS.
  - (x) The date of the latest CMS certification or audit.
  - (xi) A description of any changes in CMS, processes, or controls since the last reporting period.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

**II.B.2.g Condition:**

Visible emissions shall be no greater than 15 percent opacity from the scrubber exhaust stack. [Origin: DAQE-AN0103130027-08] Authority R307-401-8(1)(a) [BACT]

**II.B.2.g.1 Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity

limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.2.g.2      **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.g.3      **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.h      **Condition:**

The permittee shall not operate Kiln #1 at the same time as Kiln #5 until the baghouse emission control system is installed and operating on Kiln #1. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.2.h.1      **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.2.h.2      **Recordkeeping:**

Records of operational times of Kiln #1 and Kiln #5 shall be kept at all times until the baghouse installation and operation on Kiln #1 is complete. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.h.3      **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3      **Conditions on Lime Kiln #1 (Unit #K-1-BH)**

II.B.3.a      **Condition:**

Visible emissions shall be no greater than 15 percent opacity from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08, 40 CFR 63, Subpart A Table 2] Authority: R307-401-8(1)(a) [BACT], 40 CFR 63.7090(b), & 40 CFR 60.342(a)(2)

II.B.3.a.1      **Monitoring:**

Prior to the PM performance test specified in this permit, and within 180 days of baghouse installation, the permittee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere in accordance with the standard operating procedures incorporated into the OM&M plan, R307-170, UAC, 40 CFR 63, Subpart A, and 40 CFR 60, Appendix B, PS-1. The permittee shall install the COMS at the outlet of the control device. The span of the system shall be set at a minimum of 40 percent opacity.

Continuous compliance shall be demonstrated by collecting COMS data at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating that for each 6-minute block period the average opacity does not exceed 15 percent.

The permittee shall monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating, except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments). Data recorded during the conditions described below shall not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement.

- (1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;
- (2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and
- (3) Start-ups, shutdowns, and malfunctions.

The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.

#### II.B.3.a.2

##### **Recordkeeping:**

A log of the continuous opacity monitor data shall be maintained as required in R307-170 and as described in Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.3.a.3

##### **Reporting:**

Reports shall be submitted quarterly, as outlined in R307-170, Continuous Emission Monitoring Program. These quarterly reports are considered prompt notifications of deviation, as required in Provision I.S.2.c of this permit, provided all information required by Provision I.S.2.c is included in the report. For the purpose of reporting required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as all 6 minute periods during which the average opacity of the visible emissions from the lime kiln is greater than 15 percent opacity.

The permittee shall submit a compliance report semiannually containing the following information. [40 CFR 63.7131]

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. If there were no periods during which the CMS, including any operating parameter monitoring system, was out-of-control as specified in 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period;
- f. For affected emission units that use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period. This includes periods of startup, shutdown, and malfunction.
  - (i) The date and time that each malfunction started and stopped.
  - (ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - (iii) The date, time and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

- (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
- (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.
- (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- (vii) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.
- (viii) A brief description of the process units.
- (ix) A brief description of the CMS.
- (x) The date of the latest CMS certification or audit.
- (xi) A description of any changes in CMS, processes, or controls since the last reporting period.

If the permittee submits the compliance report along with, or as part of, the quarterly report required above, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report required in Section I of this permit. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

**II.B.3.b Condition:**

During startup procedures the fabric filter control device shall be allowed to be bypassed while burning start-up fuels (propane, diesel). Baghouse bypassing is allowed for 7 hours after coal firing is commenced. If bypassing occurs for more than 7 hours after coal firing is commenced, a breakdown shall be reported per R307-107-2, UAC. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.3.b.1 Monitoring:**

During startup procedures, the permittee shall monitor the time it takes to put the fabric filter control device into service.

**II.B.3.b.2 Recordkeeping:**

For each occurrence in which the control device is not in service within 7 hours of commencement of coal firing, the permittee shall make a record in a log of the occurrence, calculate and record the excess emissions and record the justification for failure to have the control device in service. Records shall be maintained in accordance with Provision I.S.1 of this permit.

**II.B.3.b.3 Reporting:**

In addition to the reporting requirements in Section I of this permit, the permittee shall submit an annual report of the occurrences of excess emissions and justifications by January 31, of the following year. Additionally, the excess emissions shall be included in the annual emissions inventory.

**Condition:**

Emissions of particulate matter shall be no greater than 0.020 grain/dscf (68 degrees F, 29.92 in Hg) and no greater than 0.12 lb/ton of stone feed (tsf) from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08, 40 CFR 63 Subpart AAAAA Table 1] Authority: R307-401-8(1)(a) [BACT], 40 CFR 60 Subpart HH, 40 CFR 63.7090(a)

**Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Initial testing shall be performed as soon as possible and in no case later than 180 days after start up. After the initial compliance testing, emissions shall be tested at least once every 3 years. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 60 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1 or 1A, and Occupational Safety and Health Administration (OSHA) and/or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. Sampling sites shall be located at the outlet of the control device(s) and prior to any releases to the atmosphere.
  - (2) Sample Method - 40 CFR 60, Appendix A, Method 5 shall be used to determine the particulate matter concentration. The minimum sample volume for each run shall be 0.85 dry standard cubic meter (dscm) (30 dry standard cubic foot (dscf)). The permittee shall conduct three separate test runs for each performance test. The minimum sample time for each run shall be 60 minutes.
  - (3) Calculations - To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

The emission rate of particulate matter (lb/tsf) from each kiln shall be computed for each run using the following equation.

$$E = C_k Q_k / PK$$

Where: E = Emission rate of PM, pounds per ton (lb/ton) of stone feed.

$C_k$  = Concentration of PM in the kiln effluent, grain/dry standard cubic feet (gr/dscf).

$Q_k$  = Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr).

P = Stone feed rate, tons per hour (ton/hr).

K = Conversion factor, 7000 grains per pound (grains/lb).

- (d) Production Rate During Testing. For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
  - 1) Testing shall be at no less than 90% of the production rate achieved to date.
  - 2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
  - 3) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful.

This process may be repeated until the maximum permitted production rate is achieved.

Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

The permittee shall determine the mass rate of stone feed to the kiln using any suitable device during the kiln PM emissions test. The measuring device shall be accurate to within  $\pm 5$  percent of the mass rate of stone feed over its operating range and shall be calibrated and maintained according to manufacturer's instructions. [origin: 60.343(d), 63.7112 Table 4]

#### II.B.3.c.2

##### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.3.c.3

##### **Reporting:**

The permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test.

Performance test results shall be documented in complete test reports that contain the following information as well as all other relevant information.

- (1) A brief description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results, including opacity;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data recorded and used to establish operating limits; and
- (10) Any other information required by the test method.

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. For affected emission units that do not use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period.
  - (i) The total operating time of each emission unit during the reporting period.
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

**II.B.3.d Condition:**

Emissions of SO<sub>2</sub> shall be no greater than 22.4 lbs/hour from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.3.d.1 Monitoring:**

- (I) Stack testing shall be performed as specified below:
- (a) Frequency. Initial testing shall be performed as soon as possible and in no case later than 180 days after start up. After the initial compliance testing, emissions shall be tested at least once every 3 years. Tests may also be required at the direction of the Executive Secretary.
  - (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - (c) Methods.
    - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
    - (2) 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C shall be used to determine the pollutant emission rate.
    - (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
  - (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
  - (e) Production Rate During Testing. For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
    - (1) Testing shall be at no less than 90% of the production rate achieved to date.
    - (2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
    - (3) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.
- (II) The permittee shall install, calibrate, maintain, and continuously operate a continuous emissions monitoring system (consisting of a SO<sub>2</sub> pollutant concentration monitor and a flow monitoring device) for the continuous measurement of SO<sub>2</sub> emissions on a kiln prior to that kiln burning pet coke or coal with a sulfur content in excess of 1.0 lb Sulfur/MMBtu.

After installation of an SO<sub>2</sub> CEMS,

- a. compliance with the SO<sub>2</sub> limit shall be based on a 3-hour block average,
- b. compliance with the SO<sub>2</sub> limit shall be demonstrated using the CEMS regardless of fuel burned in the kiln, and
- c. stack testing, as specified in (I) above, shall not be required.

The permittee shall record the output of the system for measuring the SO<sub>2</sub> emissions. The monitoring system shall comply with all applicable sections of R307-170, UAC and 40 CFR 60, Appendix B. Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under paragraph (d) 40 CFR 60.13, the permittee shall continuously operate all required continuous monitoring devices and shall meet minimum frequency of operation requirements as outlined in 40 CFR 60.13 and Section UAC R307-170.

When the SO<sub>2</sub> CEMS has been installed calibrated, and is operating, the emission rate of SO<sub>2</sub> in pounds per hour measured by the SO<sub>2</sub> CEMS for each 3-hour block averaging period shall be calculated by the following formula:

$$E_h = K \times C_{hp} \times Q_{hs} \times ((100 - \%H_2O)/100)$$

Where:  $E_h$  = hourly SO<sub>2</sub> mass emission rate during unit operation, lb/hour

$K = 1.66 \times 10^{-7}$  for SO<sub>2</sub>, lb/scf/ppm

$C_{hp}$  = hourly average SO<sub>2</sub> concentration during unit operation, ppm (dry)

$Q_{hs}$  = hourly average volumetric flow rate during unit operation, scfh (wet)

$\%H_2O$  = constant moisture value specific to each kiln, percent by volume

The Executive Secretary shall consider the source to be in compliance with SO<sub>2</sub> emission limits when the following provisions are met:

- a. Prior to installation of a SO<sub>2</sub> CEMS on a kiln, the average of three one-hour stack test results are less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- b. After installation of the SO<sub>2</sub> CEMS on a kiln, the 3-hour block average is less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- c. Three-hour block averages shall begin at 12:01 a.m. and end every 3 hours, thereafter.

#### II.B.3.d.2

##### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

For the SO<sub>2</sub> CEMS, the permittee shall keep the records specified in R307-170-8 and any additional records required by provision I.S.1 of this permit. These records shall be maintained in accordance with Provision I.S.1.

#### II.B.3.d.3

##### **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

For the SO<sub>2</sub> CEMS, the permittee shall comply with the reporting provisions in R307-170-9 and any additional reporting provisions contained in Section I of this permit. The quarterly reports required in R307-170-9 are considered prompt notification of permit deviations required in Provision I.S.2.c of this permit if all information required by Provision I.S.2.c is included in the report.



**II.B.3.e Condition:**

Emissions of NO<sub>x</sub> shall be no greater than 90.0 lbs/hour from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.3.e.1 Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Initial testing shall be performed as soon as possible and in no case later than 180 days after start up. After the initial compliance testing, emissions shall be tested at least once every 3 years. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
  - (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
  - (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
  - (1) Testing shall be at no less than 90% of the production rate achieved to date.
  - (2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
  - (3) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

**II.B.3.e.2 Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

**II.B.3.e.3 Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

**II.B.4 Conditions on Lime Kiln #2 (Unit #K-2)**

**II.B.4.a Condition:**

Visible emissions shall be no greater than 15 percent opacity from baghouse exhaust stacks. [Origin: DAQE-AN0103130027-08, 40 CFR 63, Subpart AAAAA Table 2] Authority: R307-401-8(1)(a) [BACT], 40 CFR 63.7090(b), & 40 CFR 60.342(a)(2)

**II.B.4.a.1 Monitoring:**

Prior to the PM performance test specified in this permit, the permittee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere in accordance with the standard operating procedures incorporated into the OM&M plan, R307-170, UAC, 40 CFR 63, Subpart A, and 40 CFR 60, Appendix B, PS-1. The COMS shall be installed at the outlet of the control device. The span of the system shall be set at a minimum of 40 percent opacity.

Continuous compliance shall be demonstrated by collecting COMS data at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating that for each 6-minute block period the average opacity does not exceed 15 percent.

The permittee shall monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating, except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments). Data recorded during the conditions described below shall not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement.

- (1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;
- (2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and
- (3) Start-ups, shutdowns, and malfunctions.

The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.

**II.B.4.a.2 Recordkeeping:**

A log of the continuous opacity monitor data shall be maintained as required in R307-170 and as described in Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

**II.B.4.a.3 Reporting:**

Reports shall be submitted quarterly, as outlined in R307-170, Continuous Emission Monitoring Program. These quarterly reports are considered prompt notifications of deviation, as required in Provision I.S.2.c of this permit, provided all information required by Provision I.S.2.c is included in the report. For the purpose of reporting required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as all 6 minute periods during which the average opacity of the visible emissions from the lime kiln is greater than 15 percent opacity.

The permittee shall submit a compliance report semiannually containing the following information. [40 CFR 63.7131]

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.

- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. If there were no periods during which the CMS, including any operating parameter monitoring system, was out-of-control as specified in 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period;
- f. For affected emission units that use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period. This includes periods of startup, shutdown, and malfunction.
  - (i) The date and time that each malfunction started and stopped.
  - (ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - (iii) The date, time and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
  - (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
  - (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.
  - (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
  - (vii) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.
  - (viii) A brief description of the process units. (ix) A brief description of the CMS.
  - (x) The date of the latest CMS certification or audit.
  - (xi) A description of any changes in CMS, processes, or controls since the last reporting period.

If the permittee submits the compliance report along with, or as part of, the quarterly report required above, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report required in Section I of this permit. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

#### **II.B.4.b Condition:**

During startup procedures the fabric filter control device shall be allowed to be bypassed while burning start-up fuels (propane, diesel). Baghouse bypassing is allowed for 7 hours after coal firing is commenced. If bypassing occurs for more than 7 hours after coal firing is commenced, a breakdown shall be reported per R307-107-2, UAC. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

#### **II.B.4.b.1 Monitoring:**

During startup procedures, the permittee shall monitor the time it takes to put the fabric filter control device into service.

#### II.B.4.b.2

##### **Recordkeeping:**

For each occurrence in which the control device is not in service within 7 hours of commencement of coal firing, the permittee shall make a record in a log of the occurrence, calculate and record the excess emissions and record the justification for failure to have the control device in service. Records shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.4.b.3

##### **Reporting:**

In addition to the reporting requirements in Section I of this permit, the permittee shall submit an annual report of the occurrences of excess emissions and justifications by January 31, of the following year. Additionally, the excess emissions shall be included in the annual emissions inventory.

#### II.B.4.c

##### **Condition:**

Emissions of particulate matter shall be no greater than 8.23 lbs/hour, no greater than 0.020 grain/dscf (68 degrees F, 29.92 in Hg), and no greater than 0.12 lb/ton of stone feed (tsf) from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08, 40 CFR 63 Subpart AAAAA Table 1] Authority: R307-401-8(1)(a) [BACT], 40 CFR 60 Subpart HH, 40 CFR 63.7090(a)

#### II.B.4.c.1

##### **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested at least once every three years. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 60 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1 or 1A, and Occupational Safety and Health Administration (OSHA) and/or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. Sampling sites shall be located at the outlet of the control device(s) and prior to any releases to the atmosphere.
  - (2) Sample Method - 40 CFR 60, Appendix A, Method 5 shall be used to determine the particulate matter concentration. The minimum sample volume for each run shall be 0.85 dry standard cubic meter (dscm) (30 dry standard cubic foot (dscf)). The permittee shall conduct three separate test runs for each performance test. The minimum sample time for each run shall be 60 minutes.
  - (3) Calculations - To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation. The emission rate of particulate matter (lb/tsf) from each kiln shall be computed for each run using the following equation.

$$E = C_k Q_k / PK$$

Where: E = Emission rate of PM, pounds per ton (lb/ton) of stone feed.

$C_k$  = Concentration of PM in the kiln effluent, grain/dry standard cubic feet (gr/dscf).

$Q_k$  = Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr).

P = Stone feed rate, tons per hour (ton/hr).

K = Conversion factor, 7000 grains per pound (grains/lb).

- (d) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

The permittee shall determine the mass rate of stone feed to the kiln using any suitable device during the kiln PM emissions test. The measuring device shall be accurate to within  $\pm 5$  percent of the mass rate of stone feed over its operating range and shall be calibrated and maintained according to manufacturer's instructions. [origin: 60.343(d), 63.7112 Table 4]

#### II.B.4.c.2

##### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.4.c.3

##### **Reporting:**

The permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test.

Performance test results shall be documented in complete test reports that contain the following information as well as all other relevant information.

- (1) A brief description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results, including opacity;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data recorded and used to establish operating limits; and
- (10) Any other information required by the test method.

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. For affected emission units that do not use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period.
  - (i) The total operating time of each emission unit during the reporting period.
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

**II.B.4.d Condition:**

Emissions of SO<sub>2</sub> shall be no greater than 22.4 lbs/hour from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.4.d.1 Monitoring:**

- (I) Stack testing shall be performed as specified below:
  - (a) Frequency. Emissions shall be tested at least once every three years. Tests may be also required at the direction of the Executive Secretary.
  - (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - (c) Methods.
    - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
    - (2) 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C shall be used to determine the pollutant emission rate.
    - (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
  - (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
  - (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.
- (II) The permittee shall install, calibrate, maintain, and continuously operate a continuous emissions monitoring system (consisting of a SO<sub>2</sub> pollutant concentration monitor and a flow monitoring device) for the continuous measurement of SO<sub>2</sub> emissions on a kiln prior to that kiln burning coal with a sulfur content in excess of 1.0 lb Sulfur/MMBtu.

After installation of an SO<sub>2</sub> CEMS,

- a. compliance with the SO<sub>2</sub> limit shall be based on a 3-hour block average,
- b. compliance with the SO<sub>2</sub> limit shall be demonstrated using the CEMS regardless of fuel burned in the kiln, and
- c. stack testing, as specified in (I) above, shall not be required.

The permittee shall record the output of the system for measuring the SO<sub>2</sub> emissions. The monitoring system shall comply with all applicable sections of R307-170, UAC and 40 CFR 60, Appendix B. Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under paragraph (d) 40 CFR 60.13, the permittee shall continuously operate all required continuous monitoring devices and shall meet minimum frequency of operation requirements as outlined in 40 CFR 60.13 and Section UAC R307-170.

When the SO<sub>2</sub> CEMS has been installed calibrated, and is operating, the emission rate of SO<sub>2</sub> in pounds per hour measured by the SO<sub>2</sub> CEMS for each 3-hour block averaging period shall be calculated by the following formula:

$$E_h = K \times C_{hp} \times Q_{hs} \times ((100 - \%H_2O)/100)$$

Where:  $E_h$  = hourly SO<sub>2</sub> mass emission rate during unit operation, lb/hour  
 $K = 1.66 \times 10^{-7}$  for SO<sub>2</sub>, lb/scf/ppm  
 $C_{hp}$  = hourly average SO<sub>2</sub> concentration during unit operation, ppm (dry)  
 $Q_{hs}$  = hourly average volumetric flow rate during unit operation, scfh (wet)  
 $\%H_2O$  = constant moisture value specific to each kiln, percent by volume

The Executive Secretary shall consider the source to be in compliance with SO<sub>2</sub> emission limits when the following provisions are met:

- a. Prior to installation of a SO<sub>2</sub> CEMS on a kiln, the average of three one-hour stack test results are less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- b. After installation of the SO<sub>2</sub> CEMS on a kiln, the 3-hour block average is less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- c. Three-hour block averages shall begin at 12:01 a.m. and end every 3 hours, thereafter.

#### II.B.4.d.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

For the SO<sub>2</sub> CEMS, the permittee shall keep the records specified in R307-170-8 and any additional records required by provision I.S.1 of this permit. These records shall be maintained in accordance with Provision I.S.1.

#### II.B.4.d.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

For the SO<sub>2</sub> CEMS, the permittee shall comply with the reporting provisions in R307-170-9 and any additional reporting provisions contained in Section I of this permit. The quarterly reports required in R307-170-9 are considered prompt notification of permit deviations required in Provision I.S.2.c of this permit if all information required by Provision I.S.2.c is included in the report.

#### II.B.4.e **Condition:**

Emissions of NO<sub>x</sub> shall be no greater than 120.0 lbs/hour from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

#### II.B.4.e.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested at least once every three years. Tests may be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.

- (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

**II.B.4.e.2                      Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

**II.B.4.e.3                      Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

**II.B.4.f                      Condition:**

ID fan motor rate shall be no greater than 1,800 rpm. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.4.f.1                      Monitoring:**

Fan tachometer reading is to be observed and logged once per day.

**II.B.4.f.2                      Recordkeeping:**

An operator's log shall be maintained which shall include the results of the monitoring required. All records shall be maintained in accordance with Provision I.S.1 of this permit.

**II.B.4.f.3                      Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

**II.B.5                      Conditions on Lime Kiln #3 (Unit #K-3)**

**II.B.5.a                      Condition:**

Visible emissions shall be no greater than 15 percent opacity from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08, 40 CFR 63, Subpart AAAAA Table 2] Authority: R307-401-8(1)(a) [BACT], 40 CFR 63.7090(b), & 40 CFR 60.342(a)(2)



#### II.B.5.a.1

##### **Monitoring:**

Prior to the PM performance test specified in this permit, the permittee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere in accordance with the standard operating procedures incorporated into the OM&M plan, R307-170, UAC, 40 CFR 63, Subpart A, and 40 CFR 60, Appendix B, PS-1. The COMS shall be installed at the outlet of the control device. The span of the system shall be set at a minimum of 40 percent opacity.

Continuous compliance shall be demonstrated by collecting COMS data at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating that for each 6-minute block period the average opacity does not exceed 15 percent.

The permittee shall monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating, except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments). Data recorded during the conditions described below shall not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement.

- (1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;
- (2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and
- (3) Start-ups, shutdowns, and malfunctions.

The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.

#### II.B.5.a.2

##### **Recordkeeping:**

A log of the continuous opacity monitor data shall be maintained as required in R307-170 and as described in Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.5.a.3

##### **Reporting:**

Reports shall be submitted quarterly, as outlined in R307-170, Continuous Emission Monitoring Program. These quarterly reports are considered prompt notifications of deviation, as required in Provision I.S.2.c of this permit, provided all information required by Provision I.S.2.c is included in the report. For the purpose of reporting required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as all 6 minute periods during which the average opacity of the visible emissions from the lime kiln is greater than 15 percent opacity.

The permittee shall submit a compliance report semiannually containing the following information. [40 CFR 63.7131]

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. If there were no periods during which the CMS, including any operating parameter monitoring system, was out-of-control as specified in 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period;

- f. For affected emission units that use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period. This includes periods of startup, shutdown, and malfunction.
- (i) The date and time that each malfunction started and stopped.
  - (ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - (iii) The date, time and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
  - (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
  - (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.
  - (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
  - (vii) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.
  - (viii) A brief description of the process units.
  - (ix) A brief description of the CMS.
  - (x) The date of the latest CMS certification or audit.
  - (xi) A description of any changes in CMS, processes, or controls since the last reporting period.

If the permittee submits the compliance report along with, or as part of, the quarterly report required above, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report required in Section I of this permit. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

**II.B.5.b Condition:**

During startup procedures the fabric filter control device shall be allowed to be bypassed while burning start-up fuels (propane, diesel). Baghouse bypassing is allowed for 7 hours after coal firing is commenced. If bypassing occurs for more than 7 hours after coal firing is commenced, a breakdown shall be reported per R307-107-2, UAC. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.5.b.1 Monitoring:**

During startup procedures, the permittee shall monitor the time it takes to put the fabric filter control device into service.

**II.B.5.b.2 Recordkeeping:**

For each occurrence in which the control device is not in service within 7 hours of commencement of coal firing, the permittee shall make a record in a log of the occurrence, calculate and record the excess emissions and record the justification for failure to have the control device in service. Records shall be maintained in accordance with Provision I.S.1 of this permit.

### II.B.5.b.3

#### **Reporting:**

In addition to the reporting requirements in Section I of this permit, the permittee shall submit an annual report of the occurrences of excess emissions and justifications by January 31, of the following year. Additionally, the excess emissions shall be included in the annual emissions inventory.

### II.B.5.c

#### **Condition:**

Emissions of particulate matter shall be no greater than 7.49 lbs/hour, no greater than 0.020 grain/dscf (68 degrees F, 29.92 in Hg), and no greater than 0.10 lb/ton of stone feed (tsf) from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08, 40 CFR 63 Subpart AAAAA Table 1] Authority: R307-401-8(1)(a) [BACT], 40 CFR 60 Subpart HH, 40 CFR 63.7090(a)

### II.B.5.c.1

#### **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested at least once every three years. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 60 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1 or 1A, and Occupational Safety and Health Administration (OSHA) and/or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. Sampling sites shall be located at the outlet of the control device(s) and prior to any releases to the atmosphere.
  - (2) Sample Method - 40 CFR 60, Appendix A, Method 5 shall be used to determine the particulate matter concentration. The minimum sample volume for each run shall be 0.85 dry standard cubic meter (dscm) (30 dry standard cubic foot (dscf)). The permittee shall conduct three separate test runs for each performance test. The minimum sample time for each run shall be 60 minutes.
  - (3) Calculations - To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

The emission rate of particulate matter (lb/tsf) from each kiln shall be computed for each run using the following equation.

$$E = C_k Q_k / PK$$

Where: E = Emission rate of PM, pounds per ton (lb/ton) of stone feed.

$C_k$  = Concentration of PM in the kiln effluent, grain/dry standard cubic feet (gr/dscf).

$Q_k$  = Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr).

P = Stone feed rate, tons per hour (ton/hr).

K = Conversion factor, 7000 grains per pound (grains/lb).

- (d) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

The permittee shall determine the mass rate of stone feed to the kiln using any suitable device during the kiln PM emissions test. The measuring device shall be accurate to within  $\pm 5$  percent

of the mass rate of stone feed over its operating range and shall be calibrated and maintained according to manufacturer's instructions. [origin: 60.343(d), 63.7112 Table 4]

#### II.B.5.c.2

##### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.5.c.3

##### **Reporting:**

The permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test.

Performance test results shall be documented in complete test reports that contain the following information as well as all other relevant information.

- (1) A brief description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results, including opacity;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data recorded and used to establish operating limits; and
- (10) Any other information required by the test method.

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. For affected emission units that do not use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period.
  - (i) The total operating time of each emission unit during the reporting period.
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

**II.B.5.d Condition:**

Emissions of SO<sub>2</sub> shall be no greater than 27.2 lbs/hour from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.5.d.1 Monitoring:**

- (I) Stack testing shall be performed as specified below:
  - (a) Frequency. Emissions shall be tested at least once every three years. Tests may be also required at the direction of the Executive Secretary.
  - (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - (c) Methods.
    - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
    - (2) 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C shall be used to determine the pollutant emission rate.
    - (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
  - (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
  - (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.
- (II) The permittee shall install, calibrate, maintain, and continuously operate a continuous emissions monitoring system (consisting of a SO<sub>2</sub> pollutant concentration monitor and a flow monitoring device) for the continuous measurement of SO<sub>2</sub> emissions on a kiln prior to that kiln burning coal with a sulfur content in excess of 1.0 lb Sulfur/MMBtu.

After installation of an SO<sub>2</sub> CEMS,

- a. compliance with the SO<sub>2</sub> limit shall be based on a 3-hour block average,
- b. compliance with the SO<sub>2</sub> limit shall be demonstrated using the CEMS regardless of fuel burned in the kiln, and
- c. stack testing, as specified in (I) above, shall not be required.

The permittee shall record the output of the system for measuring the SO<sub>2</sub> emissions. The monitoring system shall comply with all applicable sections of R307-170, UAC and 40 CFR 60, Appendix B. Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under paragraph (d) 40 CFR 60.13, the permittee shall continuously operate all required continuous monitoring devices and shall meet minimum frequency of operation requirements as outlined in 40 CFR 60.13 and Section UAC R307-170.

When the SO<sub>2</sub> CEMS has been installed calibrated, and is operating, the emission rate of SO<sub>2</sub> in pounds per hour measured by the SO<sub>2</sub> CEMS for each 3-hour block averaging period shall be calculated by the following formula:

$$E_h = K \times C_{hp} \times Q_{hs} \times ((100 - \%H_2O)/100)$$

Where:  $E_h$  = hourly SO<sub>2</sub> mass emission rate during unit operation, lb/hour  
 $K = 1.66 \times 10^{-7}$  for SO<sub>2</sub>, lb/scf/ppm

$C_{hp}$  = hourly average SO<sub>2</sub> concentration during unit operation, ppm (dry)  
 $Q_{hs}$  = hourly average volumetric flow rate during unit operation, scfh (wet)  
%H<sub>2</sub>O = constant moisture value specific to each kiln, percent by volume

The Executive Secretary shall consider the source to be in compliance with SO<sub>2</sub> emission limits when the following provisions are met:

- a. Prior to installation of a SO<sub>2</sub> CEMS on a kiln, the average of three one-hour stack test results are less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- b. After installation of the SO<sub>2</sub> CEMS on a kiln, the 3-hour block average is less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- c. Three-hour block averages shall begin at 12:01 a.m. and end every 3 hours, thereafter.

#### II.B.5.d.2

##### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

For the SO<sub>2</sub> CEMS, the permittee shall keep the records specified in R307-170-8 and any additional records required by provision I.S.1 of this permit. These records shall be maintained in accordance with Provision I.S.1.

#### II.B.5.d.3

##### **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

For the SO<sub>2</sub> CEMS, the permittee shall comply with the reporting provisions in R307-170-9 and any additional reporting provisions contained in Section I of this permit. The quarterly reports required in R307-170-9 are considered prompt notification of permit deviations required in Provision I.S.2.c of this permit if all information required by Provision I.S.2.c is included in the report.

#### II.B.5.e

##### **Condition:**

Emissions of NO<sub>x</sub> shall be no greater than 160.0 lbs/hour from the baghouse exhaust stack. [DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

#### II.B.5.e.1

##### **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested at least once every three years. Tests may be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
  - (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
  - (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate

and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

**II.B.5.e.2 Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

**II.B.5.e.3 Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

**II.B.6 Conditions on Lime Kiln #4 (Unit #K-4)**

**II.B.6.a Condition:**

Visible emissions shall be no greater than 15 percent opacity from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08, 40 CFR 63, Subpart AAAAA Table 2] Authority: R307-401-8(1)(a) [BACT], 40 CFR 63.7090(b), & 40 CFR 60.342(a)(2)

**II.B.6.a.1 Monitoring:**

Prior to the PM performance test specified in this permit, the permittee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere in accordance with the standard operating procedures incorporated into the OM&M plan, R307-170, UAC, 40 CFR 63, Subpart A, and 40 CFR 60, Appendix B, PS-1. The COMS shall be installed at the outlet of the control device. The span of the system shall be set at a minimum of 40 percent opacity.

Continuous compliance shall be demonstrated by collecting COMS data at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating that for each 6-minute block period the average opacity does not exceed 15 percent.

The permittee shall monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating, except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments). Data recorded during the conditions described below shall not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement.

- (1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;
- (2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and
- (3) Start-ups, shutdowns, and malfunctions.

The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.

## II.B.6.a.2

### **Recordkeeping:**

A log of the continuous opacity monitor data shall be maintained as required in R307-170 and as described in Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

## II.B.6.a.3

### **Reporting:**

Reports shall be submitted quarterly, as outlined in R307-170, Continuous Emission Monitoring Program. These quarterly reports are considered prompt notifications of deviation, as required in Provision I.S.2.c of this permit, provided all information required by Provision I.S.2.c is included in the report. For the purpose of reporting required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as all 6 minute periods during which the average opacity of the visible emissions from the lime kiln is greater than 15 percent opacity.

The permittee shall submit a compliance report semiannually containing the following information. [40 CFR 63.7131]

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. If there were no periods during which the CMS, including any operating parameter monitoring system, was out-of-control as specified in 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period;
- f. For affected emission units that use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period. This includes periods of startup, shutdown, and malfunction.
  - (i) The date and time that each malfunction started and stopped.
  - (ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - (iii) The date, time and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
  - (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
  - (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.
  - (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
  - (vii) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.
  - (viii) A brief description of the process units.
  - (ix) A brief description of the CMS.
  - (x) The date of the latest CMS certification or audit.
  - (xi) A description of any changes in CMS, processes, or controls since the last reporting period.



If the permittee submits the compliance report along with, or as part of, the quarterly report required above, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report required in Section I of this permit. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

**II.B.6.b Condition:**

During startup procedures the fabric filter control device shall be allowed to be bypassed while burning start-up fuels (propane, diesel). Baghouse bypassing is allowed for 7 hours after coal firing is commenced. If bypassing occurs for more than 7 hours after coal firing is commenced, a breakdown shall be reported per R307-107-2, UAC. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.6.b.1 Monitoring:**

During startup procedures, the permittee shall monitor the time it takes to put the fabric filter control device into service.

**II.B.6.b.2 Recordkeeping:**

For each occurrence in which the control device is not in service within 7 hours of commencement of coal firing, the permittee shall make a record in a log of the occurrence, calculate and record the excess emissions and record the justification for failure to have the control device in service. Records shall be maintained in accordance with Provision I.S.1 of this permit.

**II.B.6.b.3 Reporting:**

In addition to the reporting requirements in Section I of this permit, the permittee shall submit an annual report of the occurrences of excess emissions and justifications by January 31, of the following year. Additionally, the excess emissions shall be included in the annual emissions inventory.

**II.B.6.c Condition:**

Emissions of particulate matter shall be no greater than 17.14 lbs/hour, no greater than 0.020 grain/dscf (68 degrees F, 29.92 in Hg), and no greater than 0.12 lb/ton of stone feed (tsf) from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08, 40 CFR 63 Subpart AAAAA Table 1] Authority: R307-401-8(1)(a) [BACT], 40 CFR 60 Subpart HH, 40 CFR 63.7090(a)

**II.B.6.c.1 Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested at least once every three years. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 60 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1 or 1A, and Occupational Safety and Health Administration (OSHA) and/or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. Sampling sites shall be located at the outlet of the control

- device(s) and prior to any releases to the atmosphere.
- (2) Sample Method - 40 CFR 60. Appendix A, Method 5 shall be used to determine the particulate matter concentration. The minimum sample volume for each run shall be 0.85 dry standard cubic meter (dscm) (30 dry standard cubic foot (dscf)). The permittee shall conduct three separate test runs for each performance test. The minimum sample time for each run shall be 60 minutes.
  - (3) Calculations - To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

The emission rate of particulate matter (lb/tsf) from each kiln shall be computed for each run using the following equation.

$$E = C_k Q_k / PK$$

Where: E = Emission rate of PM, pounds per ton (lb/ton) of stone feed.

$C_k$  = Concentration of PM in the kiln effluent, grain/dry standard cubic feet (gr/dscf).

$Q_k$  = Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr).

P = Stone feed rate, tons per hour (ton/hr).

K = Conversion factor, 7000 grains per pound (grains/lb).

- (d) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

The permittee shall determine the mass rate of stone feed to the kiln using any suitable device during the kiln PM emissions test. The measuring device shall be accurate to within  $\pm 5$  percent of the mass rate of stone feed over its operating range and shall be calibrated and maintained according to manufacturer's instructions. [origin: 60.343(d), 63.7112 Table 4]

#### II.B.6.c.2

##### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.6.c.3

##### **Reporting:**

The permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test.

Performance test results shall be documented in complete test reports that contain the following information as well as all other relevant information.

- (1) A brief description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results, including opacity;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;

- (8) Documentation of calculations;
- (9) All data recorded and used to establish operating limits; and
- (10) Any other information required by the test method.

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. For affected emission units that do not use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period.
  - (i) The total operating time of each emission unit during the reporting period.
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

#### **II.B.6.d Condition:**

Emissions of SO<sub>2</sub> shall be no greater than 38.4 lbs/hour from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

#### **II.B.6.d.1 Monitoring:**

- (I) Stack testing shall be performed as specified below:
  - (a) Frequency. Emissions shall be tested at least once every three years. Tests may be also required at the direction of the Executive Secretary.
  - (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - (c) Methods.
    - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
    - (2) 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C shall be used to determine the pollutant emission rate.
    - (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
  - (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.
- (II) The permittee shall install, calibrate, maintain, and continuously operate a continuous emissions monitoring system (consisting of a SO<sub>2</sub> pollutant concentration monitor and a flow monitoring device) for the continuous measurement of SO<sub>2</sub> emissions on a kiln prior to that kiln burning coal with a sulfur content in excess of 1.0 lb Sulfur/MMBtu.

After installation of an SO<sub>2</sub> CEMS,

- a. compliance with the SO<sub>2</sub> limit shall be based on a 3-hour block average,
- b. compliance with the SO<sub>2</sub> limit shall be demonstrated using the CEMS regardless of fuel burned in the kiln, and
- c. stack testing, as specified in (I) above, shall not be required.

The permittee shall record the output of the system for measuring the SO<sub>2</sub> emissions. The monitoring system shall comply with all applicable sections of R307-170, UAC and 40 CFR 60, Appendix B. Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under paragraph (d) 40 CFR 60.13, the permittee shall continuously operate all required continuous monitoring devices and shall meet minimum frequency of operation requirements as outlined in 40 CFR 60.13 and Section UAC R307-170.

When the SO<sub>2</sub> CEMS has been installed calibrated, and is operating, the emission rate of SO<sub>2</sub> in pounds per hour measured by the SO<sub>2</sub> CEMS for each 3-hour block averaging period shall be calculated by the following formula:

$$E_h = K \times C_{hp} \times Q_{hs} \times ((100 - \%H_2O)/100)$$

Where:  $E_h$  = hourly SO<sub>2</sub> mass emission rate during unit operation, lb/hour  
 $K = 1.66 \times 10^{-7}$  for SO<sub>2</sub>, lb/scf/ppm  
 $C_{hp}$  = hourly average SO<sub>2</sub> concentration during unit operation, ppm (dry)  
 $Q_{hs}$  = hourly average volumetric flow rate during unit operation, scfh (wet)  
 $\%H_2O$  = constant moisture value specific to each kiln, percent by volume

The Executive Secretary shall consider the source to be in compliance with SO<sub>2</sub> emission limits when the following provisions are met:

- a. Prior to installation of a SO<sub>2</sub> CEMS on a kiln, the average of three one-hour stack test results are less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- b. After installation of the SO<sub>2</sub> CEMS on a kiln, the 3-hour block average is less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- c. Three-hour block averages shall begin at 12:01 a.m. and end every 3 hours, thereafter.

#### II.B.6.d.2

##### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

For the SO<sub>2</sub> CEMS, the permittee shall keep the records specified in R307-170-8 and any additional records required by provision I.S.1 of this permit. These records shall be maintained in accordance with Provision I.S.1.

#### II.B.6.d.3

##### **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

For the SO<sub>2</sub> CEMS, the permittee shall comply with the reporting provisions in R307-170-9 and any additional reporting provisions contained in Section I of this permit. The quarterly reports required in R307-170-9 are considered prompt notification of permit deviations required in Provision I.S.2.c of this permit if all information required by Provision I.S.2.c is included in the report.

**II.B.6.e Condition:**

Emissions of NO<sub>x</sub> shall be no greater than 200.0 lbs/hour from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.6.e.1 Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested at least once every three years. Tests may be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
  - (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
  - (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

**II.B.6.e.2 Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

**II.B.6.e.3 Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

**II.B.7 Conditions on Lime Kiln #5 (Unit #K-5)**

**II.B.7.a Condition:**

Visible emissions shall be no greater than 15 percent opacity from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08, 40 CFR 63, Subpart AAAAA Table 2] Authority: R307-401-8(1)(a) [BACT], 40 CFR 63.7090(b), & 40 CFR 60.342(a)(2)

#### II.B.7.a.1

##### **Monitoring:**

Prior to the PM performance test specified in this permit, the permittee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere in accordance with the standard operating procedures incorporated into the OM&M plan, R307-170, UAC, 40 CFR 63, Subpart A, and 40 CFR 60, Appendix B, PS-1. The permittee shall install the COMS at the outlet of the control device. The span of the system shall be set at a minimum of 40 percent opacity.

Continuous compliance shall be demonstrated by collecting COMS data at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating that for each 6-minute block period the average opacity does not exceed 15 percent.

The permittee shall monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating, except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments). Data recorded during the conditions described below shall not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement.

- (1) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;
- (2) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and
- (3) Start-ups, shutdowns, and malfunctions.

The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.

#### II.B.7.a.2

##### **Recordkeeping:**

A log of the continuous opacity monitor data shall be maintained as required in R307-170 and as described in Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.7.a.3

##### **Reporting:**

Reports shall be submitted quarterly, as outlined in R307-170, Continuous Emission Monitoring Program. These quarterly reports are considered prompt notifications of deviation, as required in Provision I.S.2.c of this permit, provided all information required by Provision I.S.2.c is included in the report. For the purpose of reporting required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as all 6 minute periods during which the average opacity of the visible emissions from the lime kiln is greater than 15 percent opacity.

The permittee shall submit a compliance report semiannually containing the following information. [40 CFR 63.7131]

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. If there were no periods during which the CMS, including any operating parameter monitoring system, was out-of-control as specified in 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period;
- f. For affected emission units that use a CMS to demonstrate compliance, in addition to a. - c.

above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period. This includes periods of startup, shutdown, and malfunction.

- (i) The date and time that each malfunction started and stopped.
- (ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
- (iii) The date, time and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
- (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
- (v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.
- (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- (vii) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.
- (viii) A brief description of the process units.
- (ix) A brief description of the CMS.
- (x) The date of the latest CMS certification or audit.
- (xi) A description of any changes in CMS, processes, or controls since the last reporting period.

If the permittee submits the compliance report along with, or as part of, the quarterly report required above, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report required in Section I of this permit. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

#### **II.B.7.b Condition:**

During startup procedures the fabric filter control device shall be allowed to be bypassed while burning start-up fuels (propane, diesel). Baghouse bypassing is allowed for 7 hours after coal firing is commenced. If bypassing occurs for more than 7 hours after coal firing is commenced, a breakdown shall be reported per R307-107-2, UAC. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

#### **II.B.7.b.1 Monitoring:**

During startup procedures, the permittee shall monitor the time it takes to put the fabric filter control device into service.

#### **II.B.7.b.2 Recordkeeping:**

For each occurrence in which the control device is not in service within 7 hours of commencement of coal firing, the permittee shall make a record in a log of the occurrence, calculate and record the excess emissions and record the justification for failure to have the control device in service. Records shall be maintained in accordance with Provision I.S.1 of this permit.

### II.B.7.b.3

#### **Reporting:**

In addition to the reporting requirements in Section I of this permit, the permittee shall submit an annual report of the occurrences of excess emissions and justifications by January 31, of the following year. Additionally, the excess emissions shall be included in the annual emissions inventory.

### II.B.7.c

#### **Condition:**

Emissions of particulate matter shall be no greater than 0.020 grain/dscf (68 degrees F, 29.92 in Hg), and no greater than 0.10 lb/ton of stone feed (tsf) from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08, 40 CFR 63 Subpart AAAAA Table 1] Authority: R307-401-8(1)(a) [BACT], 40 CFR 60 Subpart HH, 40 CFR 63.7090(a)

### II.B.7.c.1

#### **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Initial testing shall be performed as soon as possible and in no case later than 180 days after start up. After the initial compliance testing, emissions shall be tested at least once every 3 years. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 60 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1 or 1A, and Occupational Safety and Health Administration (OSHA) and/or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. Sampling sites shall be located at the outlet of the control device(s) and prior to any releases to the atmosphere.
  - (2) Sample Method - 40 CFR 60, Appendix A, Method 5 shall be used to determine the particulate matter concentration. The minimum sample volume for each run shall be 0.85 dry standard cubic meter (dscm) (30 dry standard cubic foot (dscf)). The permittee shall conduct three separate test runs for each performance test. The minimum sample time for each run shall be 60 minutes.
  - (3) Calculations - To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

The emission rate of particulate matter (lb/tsf) from each kiln shall be computed for each run using the following equation.

$$E = C_k Q_k / PK$$

Where: E = Emission rate of PM, pounds per ton (lb/ton) of stone feed.

$C_k$  = Concentration of PM in the kiln effluent, grain/dry standard cubic feet (gr/dscf).

$Q_k$  = Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr).

P = Stone feed rate, tons per hour (ton/hr).

K = Conversion factor, 7000 grains per pound (grains/lb).

- (d) Production Rate During Testing. For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:



- 1) Testing shall be at no less than 90% of the production rate achieved to date.
  - 2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
  - 3) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.
- Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

The permittee shall determine the mass rate of stone feed to the kiln using any suitable device during the kiln PM emissions test. The measuring device shall be accurate to within  $\pm 5$  percent of the mass rate of stone feed over its operating range and shall be calibrated and maintained according to manufacturer's instructions. [origin: 60.343(d), 63.7112 Table 4]

#### II.B.7.c.2

##### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.7.c.3

##### **Reporting:**

The permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test.

Performance test results shall be documented in complete test reports that contain the following information as well as all other relevant information.

- (1) A brief description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results, including opacity;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data recorded and used to establish operating limits; and
- (10) Any other information required by the test method.

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. For affected emission units that do not use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and

visible emission limit) during the reporting period.

- (i) The total operating time of each emission unit during the reporting period.
- (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

**II.B.7.d Condition:**

Emissions of SO<sub>2</sub> shall be no greater than 59.0 lbs/hour and no greater than 1.01 lb/ton lime from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.7.d.1 Monitoring:**

- (I) Stack testing shall be performed as specified below:
  - (a) Frequency. Initial testing shall be performed as soon as possible and in no case later than 180 days after start up. After the initial compliance testing, emissions shall be tested at least once every 3 years. Tests may also be required at the direction of the Executive Secretary.
  - (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - (c) Methods.
    - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
    - (2) 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C shall be used to determine the pollutant emission rate.
    - (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
  - (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation. To determine emission rates in units of lbs/ton lime, the emission rate in lbs/hour shall be divided by the tons/hour lime production rate. Lime production rate shall either be a direct measurement or shall be calculated using the following conversion factor: 2 tons of limestone feed equates to 1 ton of lime produced (2 tons limestone: 1 ton lime).
  - (e) Production Rate During Testing. For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
    - 1) Testing shall be at no less than 90% of the production rate achieved to date.
    - 2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
    - 3) Testing at no less than 90% of the higher rate shall be conducted. A new

maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

- (II) The permittee shall install, calibrate, maintain, and continuously operate a continuous emissions monitoring system (consisting of a SO<sub>2</sub> pollutant concentration monitor and a flow monitoring device) for the continuous measurement of SO<sub>2</sub> emissions on a kiln prior to that kiln burning pet coke or coal with a sulfur content in excess of 1.0 lb Sulfur/MMBtu.

After installation of an SO<sub>2</sub> CEMS,

- a. compliance with the SO<sub>2</sub> limit shall be based on a 3-hour block average,
- b. compliance with the SO<sub>2</sub> limit shall be demonstrated using the CEMS regardless of fuel burned in the kiln, and
- c. stack testing, as specified in (I) above, shall not be required.

The permittee shall record the output of the system for measuring the SO<sub>2</sub> emissions. The monitoring system shall comply with all applicable sections of R307-170, UAC and 40 CFR 60, Appendix B. Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under paragraph (d) 40 CFR 60.13, the permittee shall continuously operate all required continuous monitoring devices and shall meet minimum frequency of operation requirements as outlined in 40 CFR 60.13 and Section UAC R307-170.

When the SO<sub>2</sub> CEMS has been installed calibrated, and is operating, the emission rate of SO<sub>2</sub> in pounds per hour measured by the SO<sub>2</sub> CEMS for each 3-hour block averaging period shall be calculated by the following formula:

$$E_h = K \times C_{hp} \times Q_{hs} \times ((100 - \%H_2O)/100)$$

Where:  $E_h$  = hourly SO<sub>2</sub> mass emission rate during unit operation, lb/hour  
 $K = 1.66 \times 10^{-7}$  for SO<sub>2</sub>, lb/scf/ppm  
 $C_{hp}$  = hourly average SO<sub>2</sub> concentration during unit operation, ppm (dry)  
 $Q_{hs}$  = hourly average volumetric flow rate during unit operation, scfh (wet)  
 $\%H_2O$  = constant moisture value specific to each kiln, percent by volume

The Executive Secretary shall consider the source to be in compliance with SO<sub>2</sub> emission limits when the following provisions are met:

- a. Prior to installation of a SO<sub>2</sub> CEMS on a kiln, the average of three one-hour stack test results are less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- b. After installation of the SO<sub>2</sub> CEMS on a kiln, the 3-hour block average is less than the corresponding SO<sub>2</sub> emission limit for that kiln.
- c. Three-hour block averages shall begin at 12:01 a.m. and end every 3 hours, thereafter.

#### II.B.7.d.2

#### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

For the SO<sub>2</sub> CEMS, the permittee shall keep the records specified in R307-170-8 and any additional records required by provision I.S.1 of this permit. These records shall be maintained in accordance with Provision I.S.1.

II.B.7.d.3

**Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

For the SO<sub>2</sub> CEMS, the permittee shall comply with the reporting provisions in R307-170-9 and any additional reporting provisions contained in Section I of this permit. The quarterly reports required in R307-170-9 are considered prompt notification of permit deviations required in Provision I.S.2.c of this permit if all information required by Provision I.S.2.c is included in the report.

II.B.7.e

**Condition:**

Emissions of NO<sub>x</sub> shall be no greater than 210.0 lbs/hour and no greater than 3.60 lb/ton lime from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.7.e.1

**Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Initial testing shall be performed as soon as possible and in no case later than 180 days after start up. After the initial compliance testing, emissions shall be tested at least once every 3 years. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
  - (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
  - (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation. To determine emission rates in units of lbs/ton lime, the emission rate in lbs/hour shall be divided by the tons/hour lime production rate. Lime production rate shall either be a direct measurement or shall be calculated using the following conversion factor: 2 tons of limestone feed equates to 1 ton of lime produced (2 tons limestone: 1 ton lime).
- (e) Production Rate During Testing. For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
  - 1) Testing shall be at no less than 90% of the production rate achieved to date.
  - 2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
  - 3) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum

production achieved in the previous three (3) years.

II.B.7.e.2

**Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.7.e.3

**Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.7.f

**Condition:**

Emissions of CO shall be no greater than 233.0 lbs/hour and no greater than 4.00 lb/ton lime from the baghouse exhaust stack. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.7.f.1

**Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Initial testing shall be performed as soon as possible and in no case later than 180 days after start up. After the initial compliance testing, emissions shall be tested at least once every 3 years. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
  - (2) 40 CFR 60, Appendix A, Method 10 shall be used to determine the pollutant emission rate.
  - (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation. To determine emission rates in units of lbs/ton lime, the emission rate in lbs/hour shall be divided by the tons/hour lime production rate. Lime production rate shall either be a direct measurement or shall be calculated using the following conversion factor: 2 tons of limestone feed equates to 1 ton of lime produced (2 tons limestone: 1 ton lime).
- (e) Production Rate During Testing. For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
  - 1) Testing shall be at no less than 90% of the production rate achieved to date.
  - 2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
  - 3) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is

achieved.

Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

**II.B.7.f.2 Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

**II.B.7.f.3 Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

**II.B.7.g Condition:**

The permittee shall notify the Executive Secretary in writing when the installation of new equipment in the affected unit has been completed and is operational, as an initial compliance inspection is required. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If installation has not been completed by February 14, 2009, the Executive Secretary shall be notified in writing on the status of the installation. At that time, the Executive Secretary shall require documentation of the continuous installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin: R307-401-18] Authority: R307-401-18

**II.B.7.g.1 Monitoring:**

Records required for this permit condition will serve as monitoring.

**II.B.7.g.2 Recordkeeping:**

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

**II.B.7.g.3 Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

**II.B.8 Conditions on Lime Kilns #1 through #5 (Unit #K-1-5)**

**II.B.8.a Condition:**

The permittee shall use only the following fuels in the kilns.

Kiln #1, 5:     Coal  
                  Petroleum coke (pet coke)\*  
                  Coal with sulfur content exceeding 1.0 lb/MMBtu\*  
                  Propane and fuel oil as startup fuel

Kiln #2, 3, 4:   Coal  
                  Coal with sulfur content exceeding 1.0 lb/MMBtu\*

- II.B.8.a.1      **Monitoring:**
- Records required for this permit condition will serve as monitoring.
- \*Prior to burning pet coke or coal with a sulfur content in excess of 1.0 lb/MMBtu, the permittee shall install, calibrate, operate an SO<sub>2</sub> CEM on that kiln. After an SO<sub>2</sub> CEMS has been installed, calibrated, and is operating on a kiln, the coal that is burned in that kiln is exempt from the 1.0 pounds of sulfur per MMBTU heat input limitation of UAC R307-203-1(1).
- II.B.8.a.2      **Recordkeeping:**
- Use of fuel which has not been approved for use shall be recorded in a log. The log shall include the date, time, type and quantity of non-approved fuel used. Records shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.8.a.3      **Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.8.b      **Condition:**
- Production of lime shall be no greater than 4,706 tons per day and no greater than 1,516,250 tons per rolling 12-month period. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]
- II.B.8.b.1      **Monitoring:**
- Production shall be determined using an operations log. Production shall be monitored on a daily basis. Annual production shall be determined within the first 25 calendar days of each month, for the previous month, using the daily operations logs or records. The total shall then be added to the previous 11 months total for a 12 month rolling total.
- II.B.8.b.2      **Recordkeeping:**
- Records of production shall be kept for all periods of operation. Records shall be kept on a daily basis for determination of daily limit and monthly rates for determination of annual rolling totals. Records shall be kept in accordance with Provision I.S.1 of this permit.
- II.B.8.b.3      **Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.9      **Conditions on Kiln #1-5 Drive Engines (designated as Unit #KDE)**
- II.B.9.a      **Condition:**
- The permittee shall not allow, cause or permit visible emissions from gasoline powered engines. [Origin: R307-201-3(4)] Authority: R307-201-3(4)

- II.B.9.a.1                    Monitoring:**
- The permittee shall make at least one visual opacity survey each quarter for each engine. The visual opacity survey shall be performed while the unit is operating by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visual emissions observer (VEO). If visible emissions are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.
- II.B.9.a.2                    Recordkeeping:**
- The permittee shall maintain a log of the visual opacity surveys, opacity determinations, and all data required by 40 CFR 60, Appendix A, Method 9 in accordance with Provision I.S.1 of this permit.
- II.B.9.a.3                    Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.9.b                    Condition:**
- Visible emissions shall be no greater than 20 percent opacity from all diesel engines. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]
- II.B.9.b.1                    Monitoring:**
- The permittee shall make at least one visual opacity survey each quarter for each engine. The visual opacity survey shall be performed while the unit is operating by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visual emissions observer (VEO). If visible emissions are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.
- II.B.9.b.2                    Recordkeeping:**
- The permittee shall maintain a log of the visual opacity surveys, opacity determinations, and all data required by 40 CFR 60, Appendix A, Method 9 in accordance with Provision I.S.1 of this permit.
- II.B.9.b.3                    Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.9.c                    Condition:**
- The permittee shall notify the Executive Secretary in writing when the installation of new equipment in the affected unit has been completed and is operational, as an initial compliance inspection is required. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.
- If installation has not been completed by February 14, 2009, the Executive Secretary shall be notified in writing on the status of the installation. At that time, the Executive Secretary shall require documentation



of the continuous installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin: R307-401-18] Authority: R307-401-18

- II.B.9.c.1           **Monitoring:**
- Records required for this permit condition will serve as monitoring.
- II.B.9.c.2           **Recordkeeping:**
- As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.
- II.B.9.c.3           **Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.10            **Conditions on Observation Point A: NSPS Subpart 000 Baghouses (Unit #A: NSPS-000)**
- II.B.10.a           **Condition:**
- Visible emissions shall be no greater than 7 percent opacity. [Origin: DAQE-AN0103130027-08 & 40 CFR 60, Subpart 000] Authority: 40 CFR 60.672(f)
- II.B.10.a.1         **Monitoring:**
- A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.
- II.B.10.a.2         **Recordkeeping:**
- The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.10.a.3         **Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.10.b           **Condition:**
- Emissions of particulate matter (PM) shall be no greater than 0.022 grains/dscf. [Origin: 40 CFR 60, Subpart 000] Authority: 40 CFR 60.672(a)(1) (Subpart 000)

#### II.B.10.b.1

##### **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every five years, thereafter. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
  - (2) Sample Method - 40 CFR 60, Appendix A, Method 5 or Method 17 shall be used to determine the particulate matter concentration. The minimum sample volume shall be 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 deg. C (250 deg F), to prevent water condensation on the filter.
- (d) Calculations. To determine mass emission rates (lb./hr., etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

#### II.B.10.b.2

##### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

#### II.B.10.b.3

##### **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.10.c

##### **Condition:**

The permittee shall notify the Executive Secretary in writing when the installation of new equipment in the affected unit has been completed and is operational, as an initial compliance inspection is required. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If installation has not been completed by February 14, 2009, the Executive Secretary shall be notified in writing on the status of the installation. At that time, the Executive Secretary shall require documentation of the continuous installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin: R307-401-18] Authority: R307-401-18

II.B.10.c.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.10.c.2

**Recordkeeping:**

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

II.B.10.c.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.11 **Conditions on Observation Point A: Non-Subpart OOO Baghouses (Unit #A: NON-NSPS-OOO)**

II.B.11.a

**Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT]

II.B.11.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.11.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.11.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.12 **Conditions on Observation Point A: Limestone Screens (Unit #A: SCREENS)**

II.B.12.a

**Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: 40 CFR 60 (Subpart OOO)

II.B.12.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.12.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.12.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.12.b

**Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.12.b.1

**Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.12.b.2

**Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

II.B.12.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.13 **Conditions on Observation Point A: Silo & Storage Bin Vents (Unit #A: BINS)**

II.B.13.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT]

II.B.13.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.13.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.13.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.14 **Conditions on Observation Point A: Coal Silo (Unit #A: COAL SILO)**

II.B.14.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT] & 40 CFR 60.252

II.B.14.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission

unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.14.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.14.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.15 **Conditions on Observation Point A: Conveyor Transfer Points (Unit #A: TRANSFER POINTS)**

II.B.15.a

**Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT] & 40 CFR 60.672(b)

II.B.15.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.15.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.15.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.15.b

**Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions

warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.15.b.1

**Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.15.b.2

**Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

II.B.15.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.16

**Conditions on Observation Point A: Coal Conveyor Transfer Points (Unit #A: COAL TRANSFER POINTS)**

II.B.16.a

**Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT] & 40 CFR 60.252 (Subpart Y)

II.B.16.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.16.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.16.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.17 **Conditions on Observation Point A: Drop Points (Unit #A: DROP POINTS)**

II.B.17.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT]

II.B.17.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.17.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.17.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.17.b **Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.17.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.17.b.2 **Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.



II.B.17.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.18 **Conditions on Observation Point A: Generator (Unit #A: GENERATOR: Sugar Stone System)**

II.B.18.a **Condition:**

Hours of operation shall be no greater than 1,000 hours per rolling 12-month period. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.18.a.1 **Monitoring:**

Compliance with the limitation shall be demonstrated through a rolling 12-month total. The permittee shall calculate a new 12-month total by the 25th day of each month using data from the previous 12 months.

II.B.18.a.2 **Recordkeeping:**

Records documenting generator usage shall be kept in a log and they shall show the date the generator was used, the duration in hours of generator usage, and the reason for each generator usage. Records shall be maintained as described in Provision I.S.1 of this permit.

II.B.18.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.18.b **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.18.b.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.18.b.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.18.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.19

**Conditions on Direct Fire Heating System (Unit #LS-GRIND)**

II.B.19.a

**Condition:**

All used oil burned as fuel shall meet the following:

not more than 5 ppm by weight – Arsenic

not more than 2 ppm by weight – Cadmium

not more than 10 ppm by weight – Chromium

not more than 100 ppm by weight – Lead

not more than 1,000 ppm by weight - Total Halogens

not more than 0.50 percent by weight – Sulfur

Flash point shall not be less than 100 degrees Fahrenheit.

[Origin: DAQE-AN0103130027-08] Authority: R307- 401- 8(1)(a) [BACT]

II.B.19.a.1

**Monitoring:**

The permittee shall maintain test certification data for each load of used oil fuel received.

Certification shall be either by permittee testing or test reports provided by the used oil fuel vendor. The used oil fuel shall be tested for halogen content by ASTM Method D-808-81, EPA Method 8240 or Method 8260 before used oil fuel is transferred to a holding tank or burned.

II.B.19.a.2

**Recordkeeping:**

The permittee shall maintain records that document results of EPA test methods. All records shall be documented and maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.19.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.19.b

**Condition:**

The permittee may use propane, diesel and used oil in any combination in the direct fire heating system for the limestone grinding plant. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.19.b.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.19.b.2

**Recordkeeping:**

Use of fuel which has not been approved for use shall be recorded in a log. The log shall include the date, time, type and quantity of non-approved fuel used. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.19.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.20 **Conditions on Observation Point B: Conveyor Transfer Points (Unit #B: TRANSFER POINTS)**

II.B.20.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT] & 40 CFR 60.672(b)

II.B.20.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.20.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.20.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.20.b **Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.20.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.20.b.2

**Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

II.B.20.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.21

**Conditions on Observation Point B: Drop Points (Unit #B: DROP POINTS)**

II.B.21.a

**Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT]

II.B.21.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.21.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.21.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.21.b

**Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.21.b.1

**Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.21.b.2

**Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

II.B.21.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.22

**Conditions on Observation Point C: NSPS Subpart OOO Baghouses (Unit #C: NSPS-OOO)**

II.B.22.a

**Condition:**

Visible emissions shall be no greater than 7 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: 40 CFR 60.672(f)

II.B.22.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.22.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.22.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.22.b

**Condition:**

Emissions of particulate matter (PM) shall be no greater than 0.022 grains/dscf. [Origin: 40 CFR 60, Subpart OOO] Authority: 40 CFR 60.672(a)(1) (Subpart OOO)

II.B.22.b.1

**Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every five years, thereafter. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
  - (1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
  - (2) Sample Method - 40 CFR 60, Appendix A, Method 5 or Method 17 shall be used to determine the particulate matter concentration. The minimum sample volume shall be 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 deg. C (250 deg F), to prevent water condensation on the filter.
- (d) Calculations. To determine mass emission rates (lb./hr., etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.22.b.2

**Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.22.b.3

**Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.23      **Conditions on Observation Point C: Non-Subpart OOO Baghouses (Unit #C: NON-NSPS-OOO)**

II.B.23.a      **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT]

II.B.23.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location,

with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.23.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.23.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.23.b

**Condition:**

The permittee shall notify the Executive Secretary in writing when the installation of new equipment in the affected unit has been completed and is operational, as an initial compliance inspection is required. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If installation has not been completed by February 14, 2009, the Executive Secretary shall be notified in writing on the status of the installation. At that time, the Executive Secretary shall require documentation of the continuous installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin: R307-401-18] Authority: R307-401-18

II.B.23.b.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.23.b.2

**Recordkeeping:**

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

II.B.23.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.24

**Conditions on Observation Point C: Silo & Storage Bin Vents (Unit #C: BINS)**

II.B.24.a

**Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.24.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this

requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.24.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.24.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.24.b

**Condition:**

The permittee shall notify the Executive Secretary in writing when the installation of new equipment in the affected unit has been completed and is operational, as an initial compliance inspection is required. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If installation has not been completed by February 14, 2009, the Executive Secretary shall be notified in writing on the status of the installation. At that time, the Executive Secretary shall require documentation of the continuous installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin: R307-401-18] Authority: R307-401-18

II.B.24.b.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.24.b.2

**Recordkeeping:**

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

II.B.24.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.25

**Conditions on Observation Point C: Coal Silo (Unit #C: COAL SILO)**

II.B.25.a

**Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT] & 40 CFR 60.252



II.B.25.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.25.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.25.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.25.b

**Condition:**

The permittee shall notify the Executive Secretary in writing when the installation of new equipment in the affected unit has been completed and is operational, as an initial compliance inspection is required. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If installation has not been completed by February 14, 2009, the Executive Secretary shall be notified in writing on the status of the installation. At that time, the Executive Secretary shall require documentation of the continuous installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin:R307-401-18] Authority: R307-401-18

II.B.25.b.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.25.b.2

**Recordkeeping:**

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

II.B.25.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.26 **Conditions on Observation Point C: Conveyor Transfer Points (Unit #C: TRANSFER POINTS)**

II.B.26.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT] & 40 CFR 60.672(b)

II.B.26.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.26.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.26.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.26.b **Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.26.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.26.b.2 **Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

II.B.26.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.27

**Conditions on Observation Point C: Coal Conveyor Transfer Points (Unit #C: COAL TRANSFER POINTS)**

II.B.27.a

**Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT] & 40 CFR 60.252 (Subpart Y)

II.B.27.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.27.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.27.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.28

**Conditions on Observation Point C: Drop Points (Unit #C: DROP POINTS)**

II.B.28.a

**Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT]

II.B.28.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location,

with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.28.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.28.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.28.b

**Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.28.b.1

**Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.28.b.2

**Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

II.B.28.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.29

**Conditions on Observation Point D: NSPS Subpart OOO Baghouses (Unit #D: NSPS-OOO)**

II.B.29.a

**Condition:**

Emissions of particulate matter (PM) shall be no greater than 0.022 grains/dscf. [Origin: 40 CFR 60, Subpart OOO] Authority: 40 CFR 60.672(a)(1) (Subpart OOO)

II.B.29.a.1

**Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested at least once every three calendar years. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary

of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) **Methods.**

(1) **Sample Location** - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) **Sample Method** - 40 CFR 60, Appendix A, Method 5 or Method 17 shall be used to determine the particulate matter concentration. The minimum sample volume shall be 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 deg. C (250 deg F), to prevent water condensation on the filter.

(d) **Calculations.** To determine mass emission rates (lb./hr., etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) **Production Rate During Testing.** The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.29.a.2

**Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.29.a.3

**Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.29.b

**Condition:**

Visible emissions shall be no greater than 7 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: 40 CFR 60.672(f)

II.B.29.b.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.29.b.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.29.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.30

**Conditions on Observation Point D: Limestone Screens (Unit #D: SCREENS)**

II.B.30.a

**Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.30.a.1

**Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.30.a.2

**Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

II.B.30.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.30.b

**Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08] Authority: 40 CFR 60.672(b)

II.B.30.b.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity

limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.30.b.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.30.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.31 **Conditions on Observation Point D: Conveyor Transfer Points (Unit #D: TRANSFER POINTS)**

II.B.31.a

**Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT] & 40 CFR 60.672(b)

II.B.31.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.31.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.31.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.31.b

**Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not

exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.31.b.1

**Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.31.b.2

**Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

II.B.31.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.32

**Conditions on Observation Point D: Limestone Crushers (Unit #D: CRUSHERS)**

II.B.32.a

**Condition:**

Visible emissions shall be no greater than 15 percent opacity. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.32.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.32.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.32.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.



**II.B.32.b Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.32.b.1 Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

**II.B.32.b.2 Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

**II.B.32.b.3 Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

**II.B.33 Conditions on Observation Point D: Drop Points (Unit #D: DROP POINTS)**

**II.B.33.a Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

**II.B.33.a.1 Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

**II.B.33.a.2 Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.33.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.33.b

**Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.33.b.1

**Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.33.b.2

**Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

II.B.33.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.34

**Conditions on Abrasive Blasting (Unit #AB)**

II.B.34.a

**Condition:**

Visible emissions shall not exceed 40% opacity, except for an aggregate period of three minutes in any one hour. [Origin: R307-206] Authority: R307-206

II.B.34.a.1

**Monitoring:**

- (a) Visible emissions shall be measured at least semi-annually using EPA Method 9. Visible emissions from intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15 second intervals over a six-minute period shall not apply.
- (b) Visible emissions from unconfined blasting shall be measured at the densest point of the emission after a major portion of the spent abrasive has fallen out, at a point not less than five feet nor more than twenty-five feet from the impact surface from any single abrasive blasting nozzle.
- (c) An unconfined blasting operation that uses multiple nozzles shall be considered a single source unless it can be demonstrated by the permittee that each nozzle, measured separately, meets the emission and performance standards provided in R307-206-2 through 4.
- (d) Visible emissions from confined blasting shall be measured at the densest point after the air contaminant leaves the enclosure.

II.B.34.a.2

**Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.34.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.35

**Conditions on Haul Roads (Unit #HR)**

II.B.35.a

**Condition:**

Fugitive dust shall be minimized in accordance with the fugitive dust control plan. All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. Except as specified below, treatment shall be of sufficient frequency and quantity to maintain surface material in a damp/moist condition, such that the opacity shall be minimized. Water need not be applied if weather conditions would create a dangerous driving condition (i.e. below freezing).

Chemical treatment shall be applied to the main haul road and the sales road no less than three (3) times per year. More frequent applications shall be applied as necessary or as required by the fugitive dust control plan.

The half mile portion of the main haul road, closest to the plant, shall be swept at least once every 30 days. Additional sweeping shall be required, if necessary, as determined by the responsible plant personnel or the Executive Secretary. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.35.a.1

**Monitoring:**

Records of water or chemical dust suppressant applications shall serve as monitoring. Adherence to the most recently approved fugitive dust control plan shall be monitored to demonstrate that appropriate measures are being implemented to control fugitive dust.

II.B.35.a.2

**Recordkeeping:**

Records of sweeping, water and/or chemical treatment shall be kept for all periods. The records shall contain at a minimum: the date and time of applications, number of treatments made, dilution ratio, quantity applied, any rainfall received and approximate amount. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.35.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.35.b

**Condition:**

The permittee shall limit the speeds on haulage roads as follows:

Twenty-five (25) mph within the plant and in the vicinity of the crusher in the quarry area.

Forty (40) mph within 1.5 miles of either the plant or the quarry on the quarry road.

Fifty (50) mph outside the 1.5 mile distance point of the plant or quarry on the quarry road.

Forty (40) mph between the plant and the paved highway.

[Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.35.b.1

**Monitoring:**

Speed limit signs shall be posted at the entrance to the active haul road area. Speed of the vehicles noted above shall be observed at a minimum once each year. Additionally, at least once each year, all speed limit signs shall be inspected to assure they are still present.

II.B.35.b.2

**Recordkeeping:**

Observations of the equipment speed and results of annual inspections of the speed limit signs shall be recorded in a log and maintained as described in Provision S.1 in Section I of this permit.

II.B.35.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.35.c

**Condition:**

Truck hauling of stone from the quarry to the plant shall not exceed 108 round trips per day (midnight to midnight). [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.35.c.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.35.c.2

**Recordkeeping:**

A log recording the number of round trips per day shall be maintained on a daily basis and in accordance with Provision I.S.1 of this permit.

II.B.35.c.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.36

**Conditions on Sugar Stone System (Unit #SS)**

II.B.36.a

**Condition:**

Production of sugar stone shall be no greater than 135,000 tons per rolling 12-month period. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.36.a.1

**Monitoring:**

Compliance with the limitation shall be demonstrated through a rolling 12-month total. The permittee shall calculate a new 12-month total by the 25th day of each month using data from the previous 12 months.

II.B.36.a.2

**Recordkeeping:**

Records of production shall be kept for all periods of operation. Records shall be kept on a daily basis. Records shall be kept in accordance with Provision I.S.1 of this permit.

II.B.36.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.37

**Conditions on Portable Crushing System (Unit #PCS-0)**

II.B.37.a

**Condition:**

Hours of operation shall be no greater than 4,000 hours per rolling 12-month period. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.37.a.1

**Monitoring:**

Compliance with the limitation shall be demonstrated through a rolling 12-month total. The permittee shall calculate a new 12-month total by the 25th day of each month using data from the previous 12 months.

II.B.37.a.2

**Recordkeeping:**

A log recording all hours of operation for each emission unit shall be maintained on a daily basis. The log shall include the results of required monitoring and shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.37.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.37.b

**Condition:**

Production of limestone shall be no greater than 750,000 tons per rolling 12-month period. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.37.b.1

**Monitoring:**

Compliance with the limitation shall be demonstrated through a rolling 12-month total. The permittee shall calculate a new 12-month total by the 25th day of each month using data from the previous 12 months.

II.B.37.b.2

**Recordkeeping:**

Records of production shall be kept for all periods of operation. Records shall be kept on a daily basis. Records shall be kept in accordance with Provision I.S.1 of this permit.

II.B.37.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.38

**Conditions on Crushers (Unit #PCS-1)**

II.B.38.a

**Condition:**

Visible emissions shall be no greater than 15 percent opacity. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT] & 40 CFR 60.672(c)

II.B.38.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.38.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.38.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.38.b

**Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.38.b.1

**Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.38.b.2

**Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

II.B.38.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.39 **Conditions on Screen/Conveyor Transfer Points (Unit #PCS-2)**

II.B.39.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT] & 40 CFR 60.672(b)

II.B.39.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.39.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.39.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.39.b **Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Origin: DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.39.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.39.b.2 **Recordkeeping:**

An operator's log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

II.B.39.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.40

**Conditions on Conveyor Drop Points (Unit #PCS-3)**

II.B.40.a

**Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Origin: DAQE-AN0103130027-08]  
Authority: R307-401-8(1)(a) [BACT]

II.B.40.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.40.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.40.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.41

**Conditions on Engines (Unit #PCS-4)**

II.B.41.a

**Condition:**

Visible emissions shall be no greater than 20 percent opacity. [DAQE-AN0103130027-08] Authority: R307-401-8(1)(a) [BACT]

II.B.41.a.1

**Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location,



with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

II.B.41.a.2

**Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.41.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.42

**Conditions on Process Stone Handling Operations (designated as Unit #PSH)**

II.B.42.a

**Condition:**

Stack emissions of PM shall not exceed 0.05 grams per dry standard cubic meter (g/dscm). [Origin: 40 CFR 63 Subpart AAAAA] Authority: 40 CFR 63.7090(a)

II.B.42.a.1

**Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested every five years, based on the date of the most recent stack test. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 60 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Sample Method - PM emissions shall be measured using Method 5 or Method 17 in 40 CFR part 60 appendix A. (Method 17 may be used only with exhaust gas temperatures of not more than 250 degrees Fahrenheit). The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough to prevent water condensation on the filter, but no higher than 121 degrees Celsius (250 degrees Fahrenheit). The permittee shall conduct three separate test runs for each performance test. Each test run shall last at least 1 hour.

II.B.42.a.2

**Recordkeeping:**

Results of stack testing shall be maintained in accordance with the associated test method and Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

II.B.42.a.3

**Reporting:**

The permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test.

Performance test results shall be documented in complete test reports that contain the following information as well as all other relevant information.

- (1) A brief description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results, including opacity;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data recorded and used to establish operating limits; and
- (10) Any other information required by the test method.

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. For affected emission units that do not use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period.
  - (i) The total operating time of each emission unit during the reporting period.
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

**II.B.42.b Condition:**

Stack emissions shall not exceed 7 percent opacity. [Origin: 40 CFR 63 Subpart AAAAA, DAQE-AN0103130027-08] Authority: 40 CFR 63.7090(a), R307-401-8(1)(a) [BACT]

**II.B.42.b.1 Monitoring:**

The permittee shall demonstrate ongoing compliance by:

- (i) Conducting a monthly 1-minute visible emission (VE) check of each emission unit in accordance with (a) - (c) below; the check shall be conducted while the affected source is in operation.
  - (a) Conduct visual inspections that consist of a visual survey of each stack or process emission point over the test period to identify if there are VE, other than condensed water vapor. If wet dust suppression is used to control PM from PSH operations, the visible mist generated by the spray shall not be confused with particulate matter

emissions and shall not be considered VE. When a water mist of this nature is present, the permittee shall observe emissions at a point in the plume where the mist is no longer visible.

- (b) Select a position at least 15 but not more 1,320 feet from the affected emission point with the sun or other light source generally at the observer's back. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun shall be followed.
- (c) The observer conducting the VE checks need not be certified to conduct EPA Method 9 in 40 CFR 60 appendix A, but shall meet the training requirements as described in EPA Method 22 of 40 CFR 60 appendix A.
- (ii) If no VE are observed in 6 consecutive monthly checks for any emission unit, the permittee may decrease the frequency of VE checking from monthly to semi-annually for that emission unit. If VE are observed during any semiannual check, the permittee shall resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks;
- (iii) If no VE are observed during the semiannual check for any emission unit, the permittee may decrease the frequency of VE checking from semi-annually to annually for that emission unit. If VE are observed during any annual check, the permittee shall resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; and
- (iv) If VE are observed during any VE check, the permittee shall conduct a 6-minute test of opacity in accordance with Method 9 of 40 CFR 60 appendix A. The permittee shall begin the Method 9 test within 1 hour of any observation of VE and the 6-minute opacity reading shall not exceed the applicable opacity limit.

In addition, the permittee shall conduct opacity observations every five years, based on the date of the last performance test, using Method 9 in 40 CFR part 60 appendix A. The test duration shall be for at least 3 hours and at least thirty, 6-minute averages shall be obtained. If a fabric filter controls emissions from only an individual, enclosed storage bin, the test duration shall be for at least 1 hour and ten 6-minute averages shall be obtained. The permittee shall submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin.

#### II.B.42.b.2

##### **Recordkeeping:**

Results of monitoring and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.42.b.3

##### **Reporting:**

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following completion of the 5-year performance test. The permittee shall report each instance in which the limit is not met, including periods of startup, shutdown, and malfunction.

Performance test results shall be documented in complete test reports that contain the following information as well as all other relevant information.

- (1) A brief description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results, including opacity;

- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data recorded and used to establish operating limits; and
- (10) Any other information required by the test method.

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. For affected emission units that do not use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period.
  - (i) The total operating time of each emission unit during the reporting period.
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

#### II.B.42.c **Condition:**

Fugitive emissions shall not exceed 10 percent opacity. [Origin: 40 CFR 63 Subpart AAAAA, DAQE-AN0103130027-08] Authority: 40 CFR 63.7090(a), R307-401-8(1)(a) [BACT]

#### II.B.42.c.1 **Monitoring:**

The permittee shall demonstrate ongoing compliance by:

- (i) Conducting a monthly 1-minute visible emission (VE) check of each emission unit in accordance with (a) - (c) below; the check shall be conducted while the affected source is in operation.
  - (a) Conduct visual inspections that consist of a visual survey of each stack or process emission point over the test period to identify if there are VE, other than condensed water vapor. If wet dust suppression is used to control PM from PSH operations, the visible mist generated by the spray shall not be confused with particulate matter emissions and shall not be considered VE. When a water mist of this nature is present, the permittee shall observe emissions at a point in the plume where the mist is no longer visible.
  - (b) Select a position at least 15 but not more 1,320 feet from the affected emission point with the sun or other light source generally at the observer's back. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun shall be followed.

- (c) The observer conducting the VE checks need not be certified to conduct EPA Method 9 in 40 CFR 60 appendix A, but shall meet the training requirements as described in EPA Method 22 of 40 CFR 60 appendix A.
- (ii) If no VE are observed in 6 consecutive monthly checks for any emission unit, the permittee may decrease the frequency of VE checking from monthly to semi-annually for that emission unit. If VE are observed during any semiannual check, the permittee shall resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks;
- (iii) If no VE are observed during the semiannual check for any emission unit, the permittee may decrease the frequency of VE checking from semi-annually to annually for that emission unit. If VE are observed during any annual check, the permittee shall resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks; and
- (iv) If VE are observed during any VE check, the permittee shall conduct a 6-minute test of opacity in accordance with Method 9 of 40 CFR 60 appendix A. The permittee shall begin the Method 9 test within 1 hour of any observation of VE and the 6-minute opacity reading shall not exceed the applicable opacity limit.

In addition, the permittee shall conduct opacity observations every five years, based on the date of the last performance test, using Method 9 in 40 CFR 60 appendix A. The test duration shall be for at least 3 hours, but the 3-hour test may be reduced to 1 hour if, during the first 1-hour period, there are no individual readings greater than 10 percent opacity and there are no more than three readings of 10 percent during the first 1-hour period. The permittee shall submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin.

#### II.B.42.c.2

##### **Recordkeeping:**

Results of monitoring and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit. Records shall be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records may be kept offsite for the remaining 3 years.

#### II.B.42.c.3

##### **Reporting:**

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following completion of the 5-year performance test. The permittee shall report each instance in which the limit is not met, including periods of startup, shutdown, and malfunction.

Performance test results shall be documented in complete test reports that contain the following information as well as all other relevant information.

- (1) A brief description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results, including opacity;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data recorded and used to establish operating limits; and
- (10) Any other information required by the test method.

In addition to the reporting requirements specified in Section I of this permit, the permittee shall submit a compliance report semiannually containing the following information.

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit), a statement that there were no deviations from the emission limitations during the reporting period;
- e. For affected emission units that do not use a CMS to demonstrate compliance, in addition to a. - c. above, the permittee shall include the following in the compliance report for deviations from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit) during the reporting period.
  - (i) The total operating time of each emission unit during the reporting period.
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If the permittee submits the compliance report along with, or as part of, the semiannual monitoring report required in Section I of this permit and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the permittee has to report deviations from permit requirements to the permit authority.

II.C

**Emissions Trading**

(R307-415-6a(10))

Not applicable to this source.

II.D

**Alternative Operating Scenarios.**

(R307-415-6a(9))

Not applicable to this source.

### **SECTION III: PERMIT SHIELD**

A permit shield was not granted for any specific requirements.

### **SECTION IV: ACID RAIN PROVISIONS**

This source is not subject to Title IV. This section is not applicable.

## **REVIEWER COMMENTS**

This operating permit incorporates all applicable requirements contained in the following documents:

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Incorporates	DAQE-AN0103130027-08 dated August 27, 2008
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1. Comment on an item originating in DAQE-AN0103130027-08, Condition 13 regarding Permitted Source  
BACT vs. NSPS opacity limit: The referenced approval order places a 10% opacity limit on conveyor transfer points and silo/storage bin baghouses. NSPS Subpart Y places a 20% opacity limit on coal storage systems and coal conveying equipment in 40 CFR 60.252(c). They are both applicable requirements to the coal silos and coal conveyor transfer points. The more stringent requirement for 10% opacity has been included in this permit. The authority reference has been changed to show NSPS Subpart Y authority in addition to BACT authority for the following emission units.  
A: COAL SILO: Observation Point A: Coal Silo  
A: COAL TRANSFER POINTS: Observation Point A: Coal Conveyor Transfer Points  
C: COAL SILO: Observation Point C: Coal Silo  
C: COAL TRANSFER POINTS: Observation Point C: Coal Conveyor Transfer Points  
[3/23/2006] [Last updated July 8, 2008]
2. Comment on an item originating in DAQE-AN0103130027-08 regarding Permitted Source  
Baghouse bypassing for kilns: During kiln startup water vapor, generated as part of the combustion process, condenses until the kiln system temperature is above the dew point. Any condensate is detrimental to the kiln dust handling equipment. Condensate causes the dust to "blind" the filter bags, coats the dust collector hopper walls, and plugs the dust hopper discharge. Condensation would also cause corrosion of the baghouse itself. All of these effects would serve to render the baghouse ineffective at removing dust from the kiln gas stream. Therefore, bypassing of the baghouse is necessary until the kiln gas stream can be maintained at a high enough temperature so that no condensation occurs in the baghouse system. Due to the large quantities of steel, refractory and limestone, a large amount of heat input is required before the system is hot enough to prevent condensation. For the following kilns, the State has determined that a 7 hour limit for bypassing of the baghouse is justified for proper operation.  
K-1-BH: Lime Kiln #1  
K-2: Lime Kiln #2  
K-3: Lime Kiln #3  
K-4: Lime Kiln #4  
K-5: Lime Kiln #5  
[12/10/2007] [Last updated July 8, 2008]
3. Comment on an item originating in 40 CFR 60.110b, Subpart Kb regarding Permitted Source  
Condition on NSPS Fuel Storage Tanks: Condition originated in 40 CFR 60.110b, Subpart Kb is removed from this Operating Permit, based on the updated EPA rule, dated October 15, 2003. [2/03/2004] [Last updated July 8, 2008]
4. Comment on an item originating in DAQE-AN0103130027-08 regarding Permitted Source  
Emission Units permitted to Discharge Air Contaminants clarification: For Observation Point A: Drop Points stacker belts are C-309, C-9, C-409, C-311, C-11 & C-412), silo load out are U-465, K-3 rail load out, K1, K2, K3 kiln dust silo load out & K1, K2, K3 core bin load out. [3/23/2006] [Last updated July 8, 2008]

5. Comment on an item originating in this permit regarding Permitted Source  
Identification of Observation Points: The observation points listed within this permit shall be defined as:  
Observation Point A: Elevator Deck of Calcium Carbonate Plant.  
Observation Point B: Access road between #1 and #3 stone piles.  
Observation Point C: North side of Office Building.  
Observation Point D: Quarry Crusher Operator's Shack.  
[2/15/2006] [Last updated July 8, 2008]
6. Comment on an item originating in DAQE-AN0103130027-08 regarding Permitted Source  
Kiln PM<sub>10</sub> limits: The referenced approval order contains PM<sub>10</sub> limits for the following kilns that are equal to or less stringent than the PM limits originating in 40 CFR 63 Subpart AAAAA. To address this and avoid redundancy, R307-401-8(1)(a) [BACT] and DAQE-AN0103130027-08 have been included in the authority and origin citations respectively, on the PM conditions for the kilns listed below. The PM<sub>10</sub> limits contained in the AO are still applicable requirements for these kilns, but the permittee shall demonstrate compliance with them under the PM conditions contained in this permit.  
Kiln #1 with baghouse (Unit #K-1-BH) PM<sub>10</sub> limit: 6.0 lb/hr, 0.016 gr/dscf  
Kiln #2 (Unit #K-2) PM<sub>10</sub> limit: 6.58 lb/hr, 0.016 gr/dscf  
Kiln #4 (Unit #K-4) PM<sub>10</sub> limit: 13.7 lb/hr, 0.016 gr/dscf  
Kiln #5 (Unit #K-5) PM<sub>10</sub> limit: 11.7 lb/hr, 0.016 gr/dscf  
[12/10/2007] [Last updated July 14, 2008]
7. Comment on an item originating in DAQE-AN0103130027-08, Condition 24 regarding Permitted Source  
Radial Stacker Drop Distance: The referenced approval order requires the drop distance between radial stackers and stockpiles be minimized. Radial stackers are subject to a 20% opacity limitation and reduction of drop distance is a standard work practice. Therefore, this condition has not been included in the Operating Permit for the following emission units.  
A: DROP POINTS: Observation Point A: Drop Points  
B: DROP POINTS: Observation Point B: Drop Points  
C: DROP POINTS: Observation Point C: Drop Points  
D: DROP POINTS: Observation Point D: Drop Points  
[3/23/2006] [Last updated July 8, 2008]
8. Comment on an item originating in 40 CFR 60.670, Subpart OOO regarding A:NSPS-OOO:  
Observation Point A: NSPS Subpart OOO Baghouses  
TSP Test Frequency of Subpart OOO Baghouses: A TSP test frequency of five (5) years has been specified for these Subpart OOO baghouses due to a low potential for noncompliance with the particulate standard. The low potential is demonstrated by previous stack test results. Results and percentage of limit from previous tests are as follows:  
D-7122: 0.002 gm/dscm TSP (4.0%)  
D-7133: 0.0007 gm/dscm TSP (1.4%)  
D-7141: 0.001 gm dscm TSP (2.0%)  
D-310: 0.005 gm/dscm TSP (10%)  
D-414: 0.0002 gr/dscf TSP (0.9%)  
D-403: 0.0002 gr/dscf TSP (0.9%)  
[8/27/2002] [Last updated July 8, 2008]
9. Comment on an item originating in 40 CFR 60.670, Subpart OOO regarding C: NSPS-OOO:  
Observation Point C: NSPS Subpart OOO Baghouses  
TSP Test Frequency of Subpart OOO Baghouses: A TSP test frequency of five (5) years has been specified for this Subpart OOO baghouse due to a low potential for noncompliance with the particulate standard. The low potential is demonstrated by



previous stack test results. Results and percentage of limit from previous tests are as follows:

D-415: 0.0003 gr/dscf TSP (1.4%)  
[8/27/2002] [Last updated July 8, 2008]

10. Comment on an item originating in DAQE-AN0103130027-08, Condition 27 regarding K-1-5: Lime Kilns #1 through #5  
SO<sub>2</sub> CEMS for Kilns: The referenced approval order requires the permittee to have an SO<sub>2</sub> CEMS installed, certified, and operating prior to burning pet coke or coal with a sulfur content exceeding 1.0 lb/MMBtu in that kiln. The word "certified" means "calibrated" as described in AO condition 34 and referenced by AO condition 27. Therefore the word "calibrated" has been carried forward in the fuels condition for Kilns 1-5 in this permit.  
[12/10/2007] [Last updated July 14, 2008]
11. Comment on an item originating in DAQE-AN0103130027-08 regarding K-3: Lime Kiln #3  
Kiln #3 PM limits: Condition 11 of the referenced approval order changes the PM limits on Kiln #3 from 9.43 lb/hr and 0.12 lb/tsf to 7.49 lb/hr and 0.10 lb/tsf. The new limits are more stringent than the PM limit originating in 40 CFR 63 Subpart AAAAA and also more stringent than the PM<sub>10</sub> limit listed in the approval order.

The permittee has requested this change to enable them to demonstrate compliance with the BACT PM<sub>10</sub> limit under the PM condition contained in this permit which includes monitoring, recordkeeping, and reporting originating in 40 CFR 63 Subpart AAAAA.

Previously, Kiln #3 could not be included in Comment 6 above because the BACT PM<sub>10</sub> limit was more stringent than the Subpart AAAAA limit under certain operating conditions. The PM<sub>10</sub> limit contained in the AO (7.54 lb/hr, 0.016 gr/dscf) is still an applicable requirement for Kiln #3, but the permittee shall demonstrate compliance with it under the PM condition contained in this permit. R307-401-8(1)(a) [BACT] and DAQE-AN0103130027-08 are included in the authority and origin citations respectively, on the PM condition for Kiln #3. [Last updated July 8, 2008]